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2614

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Daniel A. Henderson      Examiner: Olisa Onwah  
Application No: 08/726,024      Art Unit: 2614  
Filing Date: 01/05/1994  
Title: Method and Apparatus For Improved Personal Communication Devices  
and Systems  
Attorney Docket: H-119 (HEND-0029)

\*\*\*\*\*  
**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner of Patents & Trademarks, U. S. Patent and Trademark Office, P. O. Box 1450, Alexandria, VA 22313-1450 on August 14, 2006

By: Robert K. Henderson  
Robert K. Henderson  
Reg. No.: 24,581  
Attorney for Applicant

**RULE 131 DECLARATION**

Commissioner of Patents & Trademarks  
U.S. Patent and Trademark Office  
P. O. Box 1450  
Alexandria, VA 22313-1450

Now comes Daniel A. Henderson and deposes and says:

1. That I am the inventor of the invention described in the patent application entitled "Method and Apparatus For Improved Personal Communication Devices and Systems, U.S. Patent Application No. 08/726,024, having a priority date of January 5, 1994.
2. That this priority date is based on U.S. Patent Application Serial No. 08/177,851, filed January 5, 1994, the subject application having claimed benefit thereof under 35 USC 119, as can be seen in Appendix A.

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3. That in the prosecution of the above-captioned case a reference to Richard S. Wolff et al., U.S. Patent No. 5,327,486, which issued July 5, 1994 and has a filing date of March 22, 1993, was cited against the claims of this case.

4. That also in the prosecution of the above-captioned case a reference to C. Patrick Richardson et al., U.S. Patent No. 5,459,458, having an issue date of October 17, 1995 and an effective filing date of July 6, 1993 was cited against the claims of the subject case.

5. That as will be seen below, Applicant conceived of the claimed invention prior to March 22, 1993 and July 6, 1993 and did not abandon, suppress or conceal the invention from at least before March 22, 1993 to either an actual reduction to practice in July 1993 or to January 5, 1994, the filing date of this application.

6. That as can be seen from Appendix B, Applicant conceived the subject invention prior to both March 22, 1993 and July 6, 1993, as evidenced by a block diagram including the processing blocks used to communicate with a called party having a portable communication device, namely the Intellect handheld device.

7. That this block diagram describes a pageable device, namely the Intellect handheld, over a paging network, also showing the ability to enter a phone number, which phone number is recovered by an 800-number caller identification in which the caller identification information pertinent to the telephone number of the calling party is provided automatically by the telephone network utilizing the block labeled "caller's telephone number dispatched to paging network."

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8. That this caller identification information is transmitted from the above-identified block to the paging network, which caller identification information is then transmitted from the paging network to the portable communication device.

9. That the concept claimed in Claim 192 is described in the block diagram and flow chart of Appendix B.

10. That as indicated in Appendix C, the claimed invention was actually reduced to practice and was demonstrated at a meeting with Kazuo Hashimoto of Hashimoto Corporation in July of 1993 pursuant to a licensing agreement in which the undersigned was required to demonstrate a working prototype (Appendix W), and that block diagrams for this prototype are presented in Appendices E, F, G and X hereto.

11. That the working prototype demonstration included communicating information from a calling party connected to a communications network that provided caller identifying information to a called party having a portable communication device that can receive a message, with the message coming from a message center in communication with the communications network, with the caller identifying information being transmitted to the portable device through the use of a wireless network.

12. That the picture depicted in Appendix C is a picture of a handheld device along with a display that displayed the caller identification and associated message information transmitted via the wireless network.

13. That this device later became known as the Intellect product.

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14. That diligence from the date of conception to the actual reduction to practice and/or the effective filing date of the subject application is shown by the month-by-month activity indicated by the documents listed below and available in the indicated appendices:

<u>Appendix</u>	<u>Date</u>	<u>Description</u>
D	12/1992	"Intellipage" drawing shows wireless device, paging network, Caller ID data and programmable interface. Witnessed by Suzanne Billing Henderson.
E	01/1993	"Node Mail" system diagram showing automatic telephone number detection at a computer message center. Witnessed by Suzanne Billing Henderson.
F	02/1993	"Radio Frequency Device" programmable by a PC using data interface software via IR, Serial, Parallel RJ-11 or PCMCIA. Witnessed by Suzanne Billing Henderson.
G	02/1993	"Intellipager product view created by Daniel A. Henderson
H	03/1993	Letter from Real Time Strategies regarding Daniel A. Henderson's inquiry for design assistance in messaging and wireless communication by cellular and paging.
I	03/1993	Assignment and License agreement with Vanig Godoshian regarding US Patent 4,490,579.
J	04/1993	Notes regarding Daniel A. Henderson's discussions with NEC - North America Pager engineering Department and their legal department as well as Motorola at their Boynton Beach, Florida facility.
K	04/1993	Non-disclosure agreement between Doctor Design, Inc. and Innovad regarding Daniel A. Henderson's RFP for design assistance of an auto-dialing paging receiver.
L	04/1993	Letter from NEC America Inc. indicating that they will not meet with Daniel A. Henderson without signing their NDA in which Daniel A. Henderson would have given up all his rights.
M	04/1993	Letter to Doctor Design Inc. thanking them for Daniel A. Henderson's visit to their facilities to pursue production design assistance.
N	04/1993	Non-disclosure Agreement with Robert Hotto, design engineer referred from Doctor Design.

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O	05/1993	Approx. date is early May 1993, which shows Daniel A. Henderson's notations for the phone number in Japan for Kazuo Hashimoto seeking a license under his patents.
P	05/1993	Facsimile received from AT&T customer information center regarding research about Caller ID technical reference materials.
Q	05/1993	Engineering Services Quotation received from Doctor Design Inc.
R	05/1993	Non-disclosure agreement with Innovad and Hashimoto Corporation regarding the Radio Frequency Auto Dialer.
S	05/1993	Short thank-you note to Kazuo Hashimoto after initial meeting.
T	06/1993	Letter to Kazuo Hashimoto with draft letter of understanding for license under his US Patents 4,821,308; 4,882,744; and 4,065,642.
U	06/1993	Letter to Kazuo Hashimoto regarding GlobalLink company and the draft license agreement
V	06/1993	Non-disclosure agreement between GlobalLink Communications Inc. and Innovad - Dan Henderson.
W	06/1993	Letter of understanding - signed License Agreement between Hashimoto Corporation and Daniel Henderson/Innovad Company.
X	07/1993	Product view and feature chart shows the "intellect": prototype now in the Smithsonian that was in development for Hashimoto demonstration.
Y	08/1993	Letter to Hewlett Packard requesting license or joint venture for serial infrared Link and PCMCIA technology.
Z	08/1993	Fax received from inquiry related to AlphaPage product
AA	08/1993	Article covering the Patent Information Clearing House that resulted in an interview of Daniel A. Henderson. Henderson often conducted his own prior art searches in 1992-1995.
BB	08/1993	Drawing that showed one cellular carrier implementation for messaging.
CC	09/1993	Letter to NEC America Inc. again requesting a meeting and mutually agreeable NDA
DD	10/1993	Letter to Shinwa Communications of America Inc. after first meeting and business cards received for tentative meeting in Japan.
EE	10/1993	Letter from Mitsui Comtek Corp. offering to assist in meeting in Japan with Casio.

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FF	11/1993	Product data sheet for speaker to be spec'ed in the "Intellect" device - received from Darren Townsley, then a sales engineer at Steven Engineering.
GG	11/1993	Letter to Shinwa Communications of America Inc. informing them that Daniel A. Henderson had become assistant to Kazuo Hashimoto.
HH	12/1993	Budget analysis for patent / market research related to invention (note brochure printing, travel for Las Vegas CE Show, Shinwa visit).
II	12/1993	Non-disclosure agreement with Morris Reese regarding Caller ID and Paging System
JJ	12/1993	"Intellect" product brochure and packing receipt.
KK	01/1994	Teledynamics Product brochure picked up for research in Las Vegas Consumer Electronic Show.

15. That as can be seen from the documents associated with the above appendices, the concept was complete and witnessed prior to March 22, 1993 and thus prior to July 6, 1993, thus predating the filing dates of the Wolff et al. and the Richardson et al. patents.

16. That diligence is shown from the conception date to the date of actual reduction to practice and from the conception date to the constructive reduction to practice afforded by the filing date of this patent application.

17. That the invention was not abandoned, suppressed or concealed, as is shown by month-to-month activity in support of bringing the claimed subject matter to commercialization.

Further deponent sayeth not.

I further declare that all the statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States

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Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



-----  
Daniel A. Henderson

Date: 8/4/06

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**APPENDIX A**



**(12) United States Patent**  
**Henderson**

**(10) Patent No.:** US 6,278,862 B1  
**(45) Date of Patent:** \*Aug. 21, 2001

**(54) METHOD AND APPARATUS FOR  
 ENHANCING THE EFFICIENT  
 COMMUNICATION OF INFORMATION IN  
 AN ALPHANUMERIC PAGING NETWORK**

**(76) Inventor:** Daniel A. Henderson, 33300 Mission Blvd., Union City, CA (US) 94587

**(\*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

**(21) Appl. No.:** 08/177,851

**(22) Filed:** Jan. 5, 1994

**(51) Int. Cl.:** H03Q 7/00; G08B 5/22

**(52) U.S. Cl.:** 455/31.1; 340/825.27; 340/825.44

**(58) Field of Search:** 379/56, 63, 355, 379/62; 340/825.44, 825.27; 455/355, 31.1

**(56) References Cited**

**U.S. PATENT DOCUMENTS**

4,065,642	12/1977	McClure	179/18 B
4,072,824	2/1978	Phillips	179/18 B

(List continued on next page.)

**FOREIGN PATENT DOCUMENTS**

3315625	10/1984 (DE)	379/58
3329267	2/1985 (DE)	379/58
3421886	12/1985 (DE)	H04M/100
0 212 761	8/1986 (EP)	H04Q/7/04

(List continued on next page.)

**OTHER PUBLICATIONS**

Messaging: A New Direction—Awash in E-Mail troubles? A Raft Of New Products Is Coming To The Rescue., Network Computing, Oct. 1, 1996, pp p. 58.

IdentalFone overview from website dated Oct. 17, 1996.  
 NetPAGE product overview.

(List continued on next page.)

**Primary Examiner:** Edward L. Coles, Sr.

**Assistant Examiner:** Pan Lee

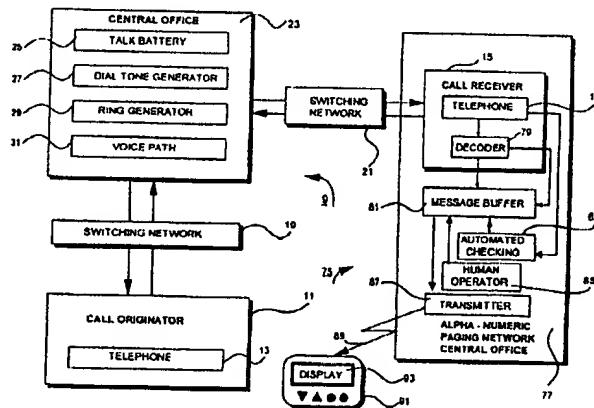
**(74) Attorney, Agent, or Firm:** Melvin A. Hunn

**(57)**

**ABSTRACT**

A method and apparatus is described for enhancing the communication of data in an alphanumeric paging network. In accordance with the present invention, caller-identification information is automatically transmitted through a telephone network to a central office of an alphanumeric paging network when a page-originating communicant engages the network. The caller-identification information preferably includes numeric data which identifies the telephone number of the particular telephone unit utilized by the page-originating communicant to engage the alphanumeric paging network, and alphanumeric text which identifies the entity associated in the telephone directory with that particular telephone number. This information may be utilized in an automated fashion to reduce the required interaction between the alphanumeric paging network and the page-originating communicant. In particular it is helpful in minimizing the amount of human interaction required. The page-originating communicant may be challenged or queried to determine the veracity and accuracy of the information transmitted in the caller-identification signal, preferably in an automated fashion utilizing a synthesized voice presentation of questions coupled with responses provided by the page-originating communicant with the key pad of the particular telephone being utilized by him or her. The page-originating communicant may then be optionally engaged by a human or automated operator which then receives an optional message for transmission to the page-receiving communicant along with the caller-identification information. Upon receipt, the portable communication device carried by the page-receiving communicant decodes the information and utilizes it in a manner to determine what is displayed on the display of the portable communication device.

**6 Claims, 23 Drawing Sheets**





08/726024.

SPECIFICATION

Docket No. 0317MH-23513

CERTIFICATE OF EXPRESS MAIL	
EXPRESS MAIL NO. <u>PM 385697526 US</u>	
<i>I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail" Post Office to Addressee* under 37 CFR § 1.10 on the date indicated below and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.</i>	
<u>10/4/96</u>	<u>Mel A. Henderson</u>
Date of Deposit	Signature
<u>Oct 4, 1996</u>	

TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN that I, DANIEL A. HENDERSON, have invented new and useful improvements in a

METHOD AND APPARATUS FOR IMPROVED PAGING RECEIVER AND  
SYSTEM

of which the following is a specification:

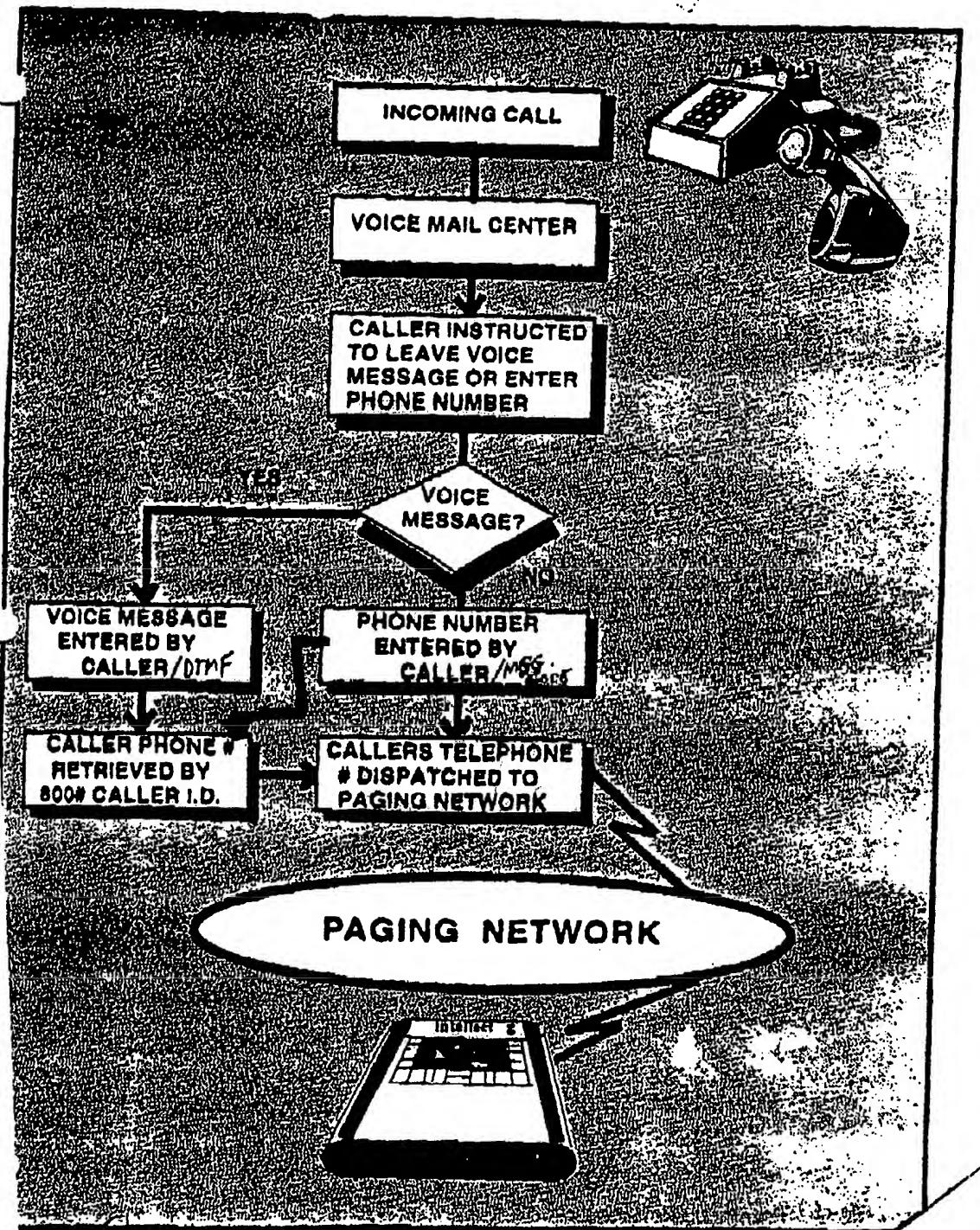
## **CROSS-REFERENCE TO RELATED APPLICATIONS**

This Application claims the benefit of the filing date under 35 USC §§119 and/or 120, and 37 CFR §§1.60 and 1.78 to the following U.S. and U.S. provisional patent applications, and is a continuation-in-part of the U.S. patent application:

1. U.S. provisional patent application serial no. 60/005,029, filed on October 6, 1995, entitled "Method and Apparatus for Improved Paging Receiver and System"; and

2. U.S. patent application serial no. 08/177,851, filed on January 5, 1994, entitled "Method and Apparatus for Enhancing the Efficient Communication of Information in an Alphanumeric Paging Network".

## **APPENDIX B**

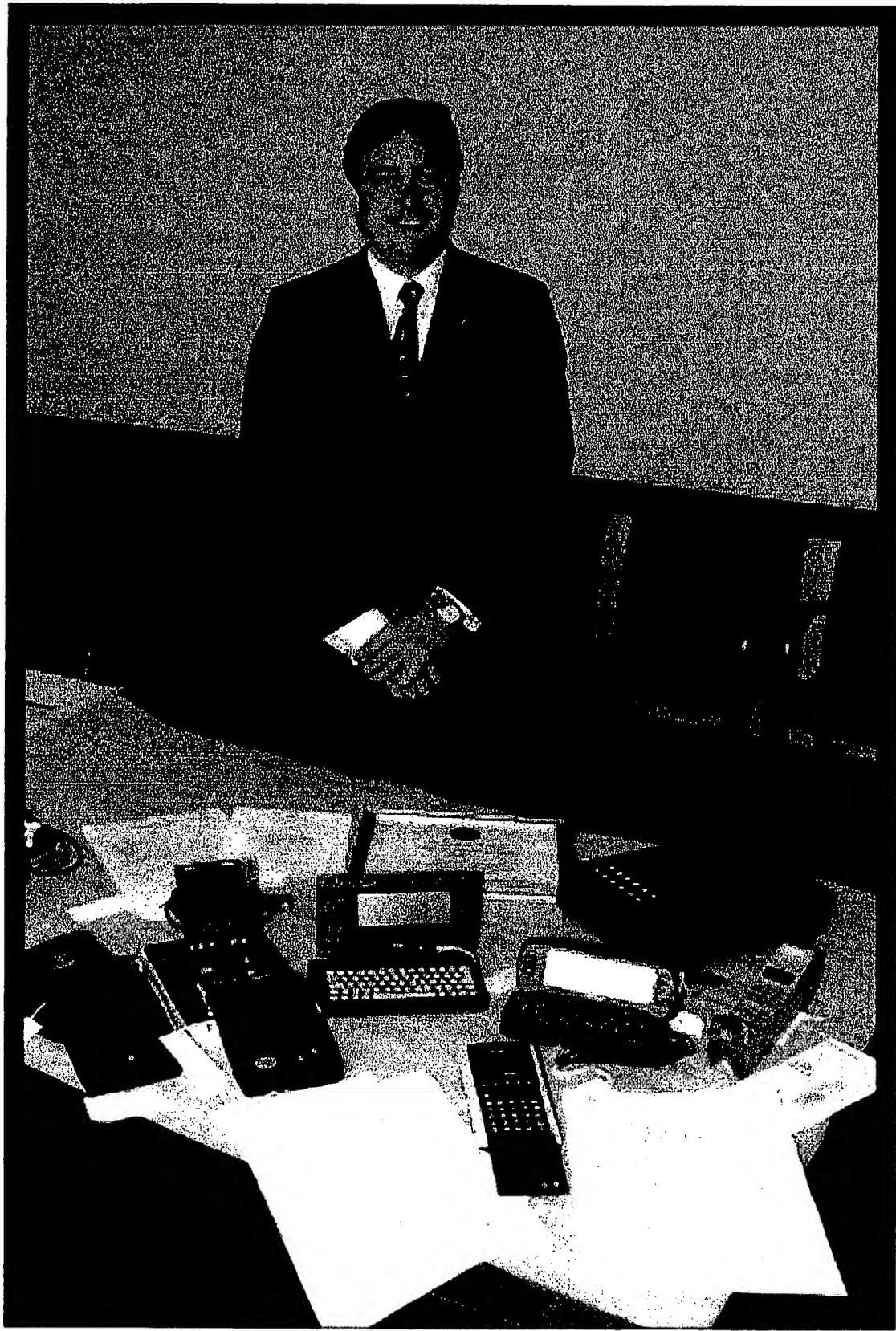


X Wlder  
Jan 19, 1990

X James L. Herkman

04- A&I

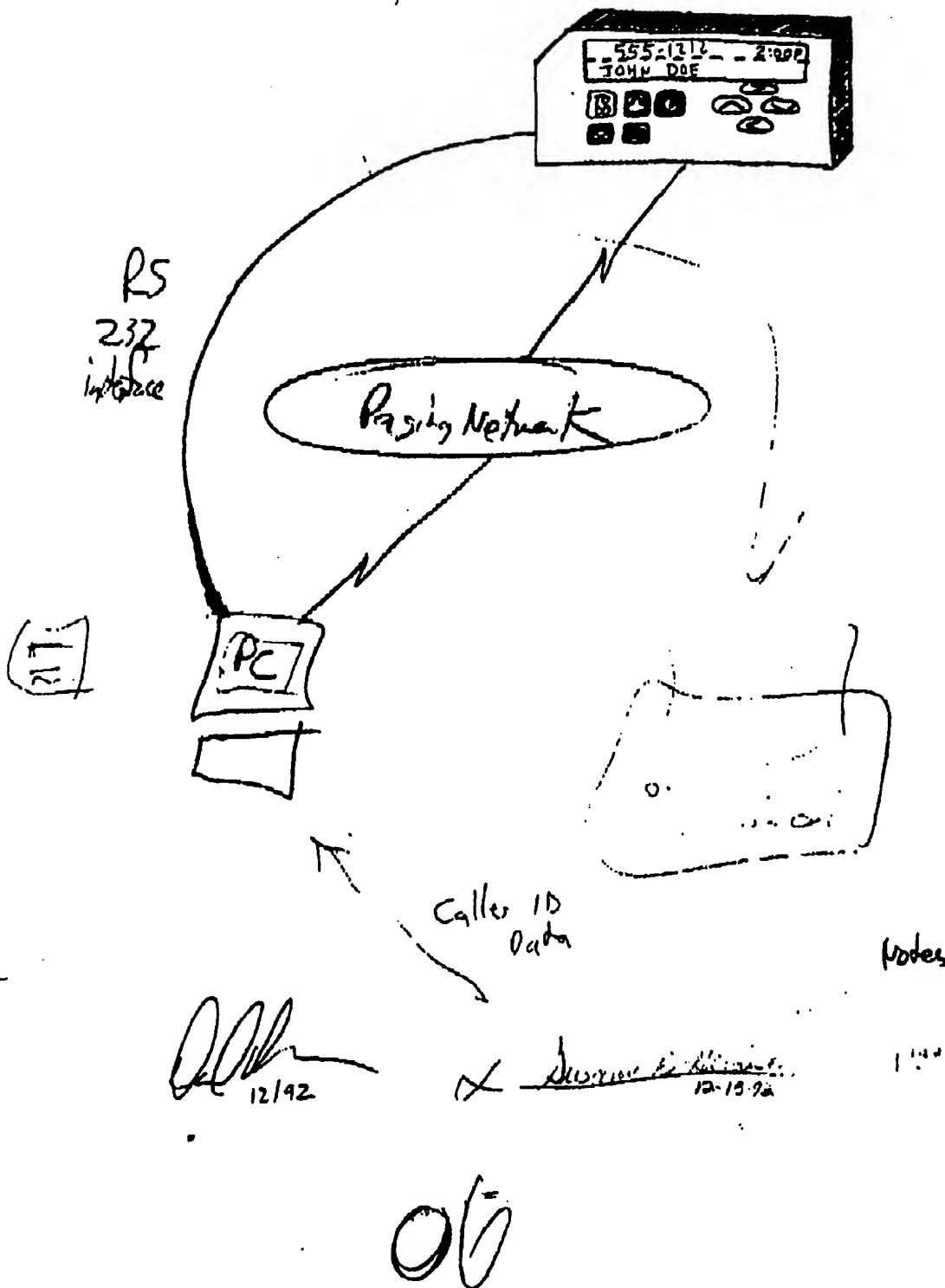
## **APPENDIX C**



**Received in the permanent collection of the Smithsonian Institution**

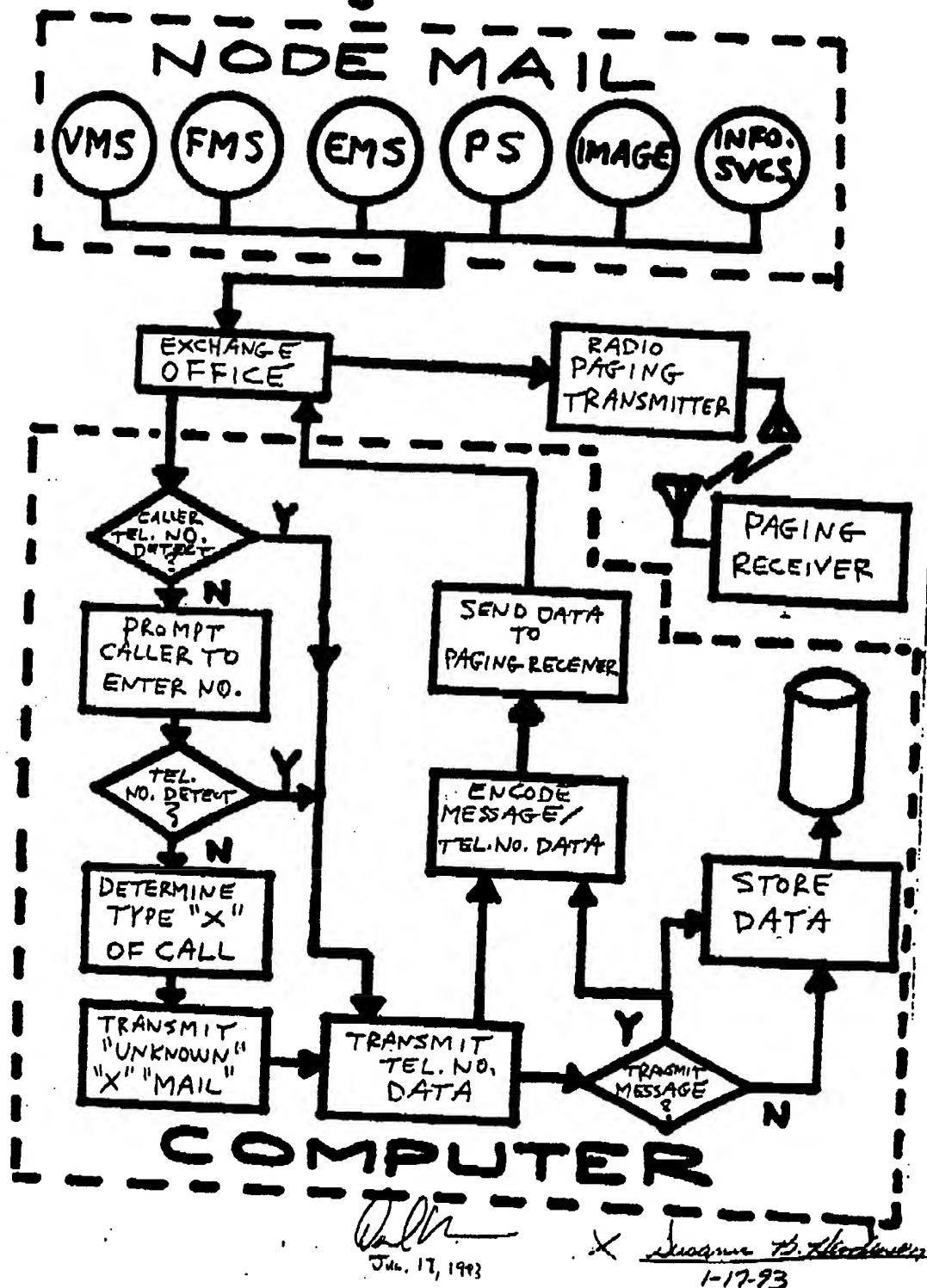
## **APPENDIX D**

# INTELLIPAGE™

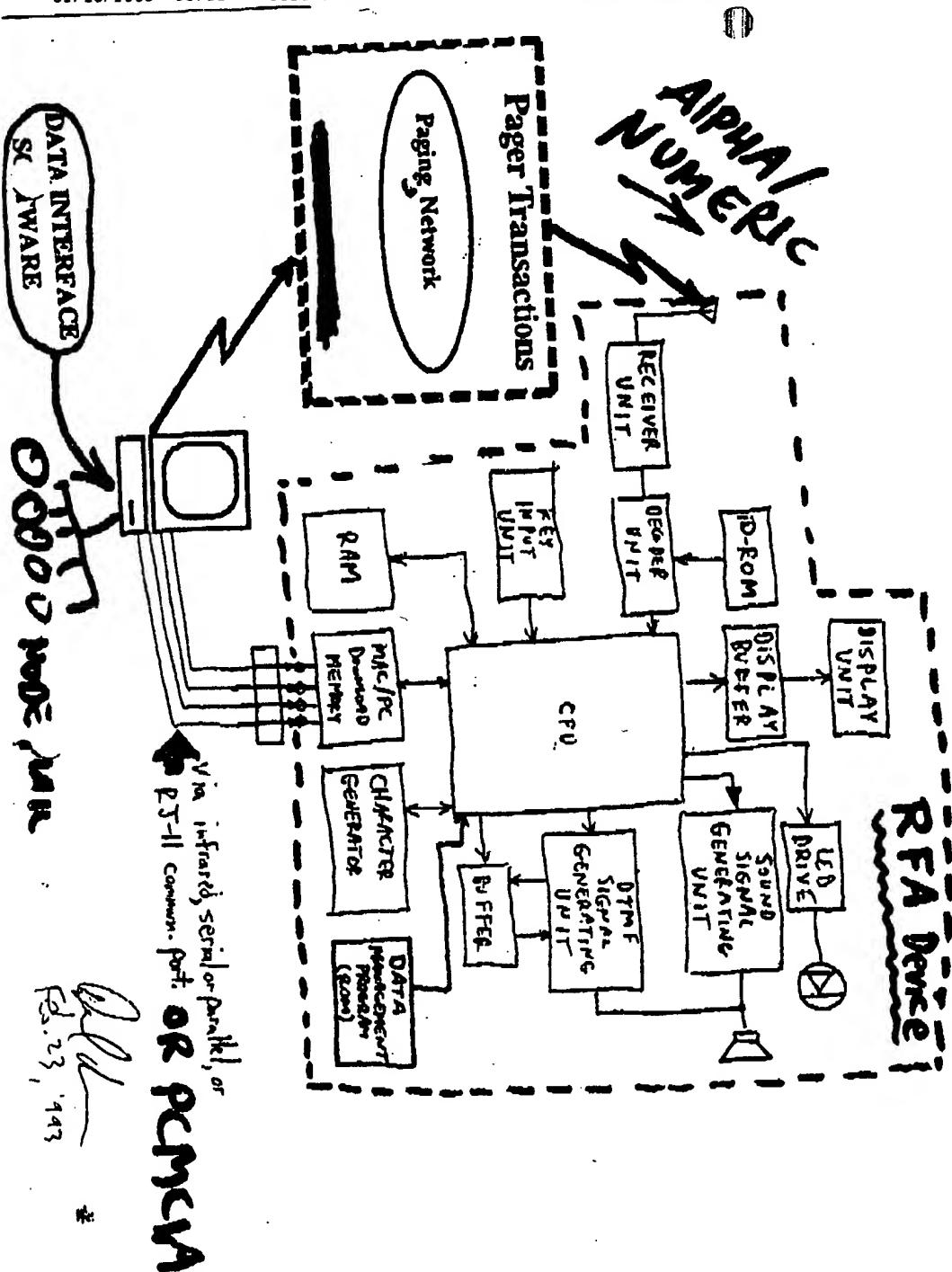


## **APPENDIX E**

Figure



## **APPENDIX F**

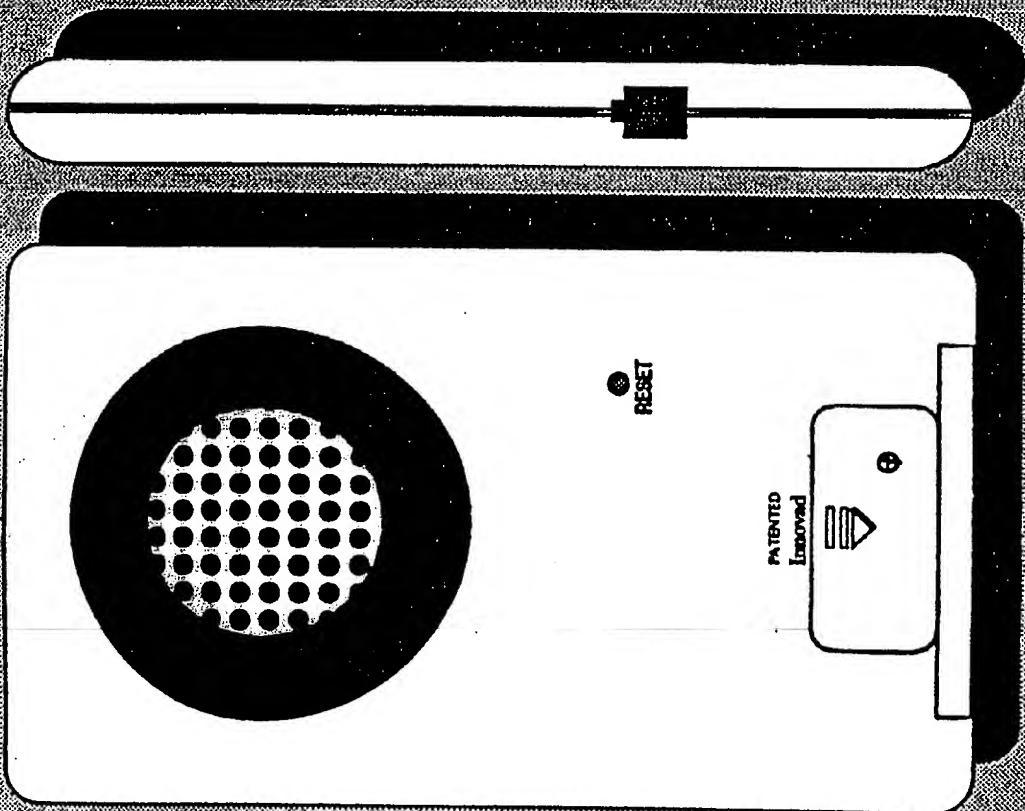
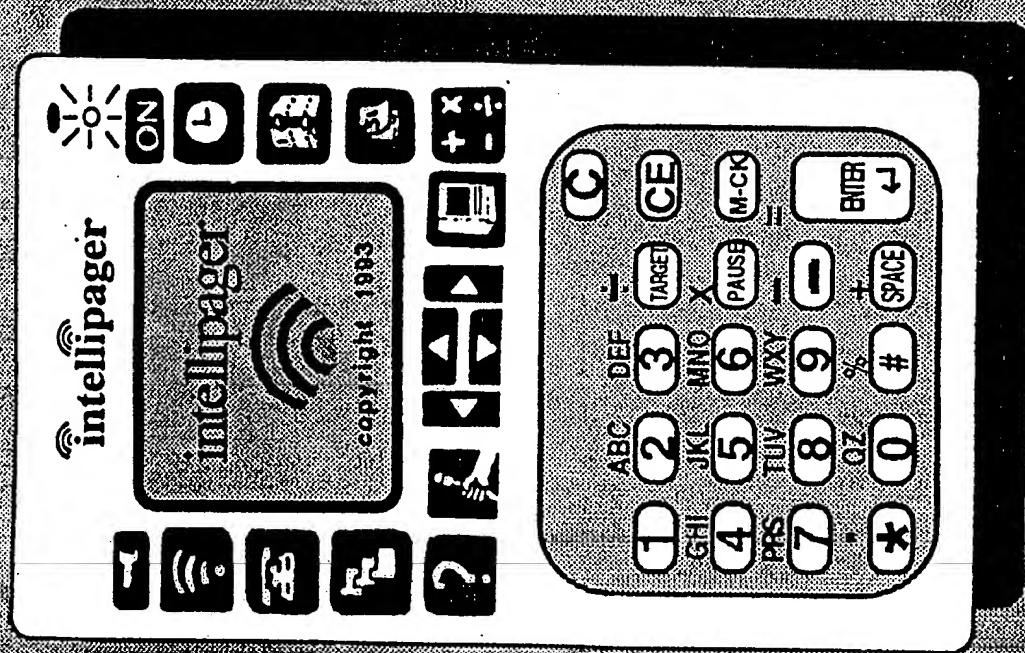


X Suzanne B. Klemmons  
2-23-93

07

## **APPENDIX G**

February 23, 1993



intelliPager product view

Front

Side

Back

## **APPENDIX H**



(516) 939-6655

960 S. Broadway  
Suite 118C  
Hicksville, New York 11801

FAX (516) 939-6189

March 12, 1993

Mr. Dan Henderson  
33300 Mission blvd.  
Suite 131  
Union City, CA 94587

Dear Mr. Henderson,

Thank you for your interest in Real Time Strategies and its products. As you will see from the enclosed product literature, RTS provides equipment ranging from hand-held data entry devices, up to radio paging networks.

Real Time Strategies is a telecommunication product manufacturing company which builds software intensive products which are easily modified to meet the specific requirements of our customers. The founders of RTS have more than 35 years of experience in the design, development and support of complex, comprehensive, radio paging, voice mail, cellular radio, telephone answering, remote diagnostic, data and voice communication products.

After you have had an opportunity to review the enclosed information, feel free to contact our offices to review these products in more detail. If you would like a copy of the Pagentry™ operations guide in order to learn more about this product, please let us know. Thank you for your inquiry regarding Real Time Strategies.

Sincerely,

Spencer Kravitz  
Executive Vice President

SK/jmb  
enclosures

## **APPENDIX I**

## **LICENSE AGREEMENT for US PATENT 4,490,579**

This Agreement is made and entered into at Union City, California by and between Daniel A. Henderson, a US citizen located at 33300 Mission Blvd. #131, Union City, California, 94587 dba "Innovad" ( Licensee), and Vanig Godoshian, a US citizen located at 2500 Pontiac Dr., Sylvan Lake, Michigan, 48320 ( Lessor).

Whereas, Lessor is the sole owner of all right, title, and interest in and to the United States Patent number 4,490,579, entitled "Auto-Dialing Pager Receiver";

Whereas, Licensee desires to obtain an exclusive license and assignment rights of said patent;

Now, therefore, in consideration of the promises above and the mutual covenants and agreements hereinafter, the parties agree as follows:

### **DEFINITIONS**

1. The "licensed patent" refers to the United States Patent number 4,490,579 entitled "Auto Dialing Pager Receiver".

2. The terms "licensed pagers" and "pgers" refer to any acoustically coupled personal communication device, dialer, or card which is programmable by a radio signal transmission to generate one or more DTMF numbers as disclosed in US patent 4,490,579.

### **LICENSE GRANT / ASSIGNMENT RIGHTS**

4. Lessor hereby grants to Licensee an exclusive, transferable right under the Licensed Patent to make, use, and sell licensed pagers throughout the United States, and its territories and possessions, for a term of five years (60 months) from the date of execution of this agreement.

### **AUTOMATIC ASSIGNMENT OF PATENT**

5. Upon receipt by Lessor of \$ [REDACTED] within the term of this agreement, Lessor will grant an irrevocable assignment of ownership of the licensed patent without delay. Receipt by the Lessor of \$ [REDACTED] Dollars ) constitutes payment in full and Licensee will have no further duty to pay royalties or fees to Lessor. If a total of \$ [REDACTED] is not received by the Lessor during the term of this agreement, then rights to automatic assignment will be revoked at the end of the term of this Agreement and the license will revert to a non-exclusive license for the remaining life of the patent.

### **CONSIDERATION**

6. In consideration for the license granted above, Licensee shall pay to Lessor an initial royalty payment of \$ [REDACTED] U.S. Dollars) payable upon execution of this agreement.

7. Additional royalty payments will be made on a semi-annual basis at a rate of  $\frac{1}{2}$  % ( [REDACTED] ) of all U.S. Pager sales within the term of this agreement.

8. A licensed pager will be considered "sold" when billed, except that upon the termination of this License Agreement, all inventory of the Licensee of licensed pagers existing on or prior to the date of such termination shall be considered sold. Royalties paid to Lessor of returned licensed pagers shall be non-refundable to Licensee.

## SUB-LICENSING

9. Licensee agrees and undertakes that Licensee may sub-license the rights herein granted and that Licensor will authorize any other person, firm, or corporation to make, use, or sell the inventions herein licensed so long as the agreed upon [REDACTED] royalty is paid to Licensor.

## ACCOUNTING

10. Licensee agrees to make and keep full and accurate books and records showing the sales of licensed dialers sold under the license herein granted in sufficient detail to enable royalties payable to be determined.

11. Licensee further agrees that Licensor shall be permitted to inspect such books and records from time to time, during regular business hours, to verify the royalty reports and payments provided by this agreement.

12. For the purpose of computing royalties under this Agreement, the year shall be divided semi-annually, beginning January 1 and July 1 of each year period. Within ninety days after the end of each semi-annual period, Licensee shall submit a written report to Licensor setting forth the number of licensed pagers which have been sold during the preceding six month period. Licensee shall remit at that time to Licensor at Licensor's designated address the full amount of royalties due for such six month period.

13. In the event of termination of this Agreement for any reason whatsoever, Licensee agrees to permit Licensor or its agent to inspect all said records and books of Licensee and to investigate generally all transactions of business carried on by Licensee pursuant to this Agreement and the license hereby granted, for a period of six months after such termination.

## ENFORCEMENT

14. Licensor will cooperate fully in supplying any information required for enforcement of the patent against companies infringing the patent. Licensee shall bear all costs and legal fees associated with enforcement of the patent and shall bear all direct expenses incurred.

## DURATION

15. This Agreement shall become effective on the date of execution by Licensee, and unless sooner terminated or extended as otherwise herein provided, shall remain in effect for five (5) years.

## TERMINATION

16. This Agreement may be terminated by Licensor if Licensee shall at any time make default in the payment of any royalty as herein provided, or shall commit any breach of any covenant or agreement herein contained, or shall make any false report, and shall fail to remedy any such default or breach within thirty (30) days after written notice hereof by Licensor.

## ARBITRATION

17. Every dispute, difference, or question arising between the parties in connection with this Agreement or patent or any clause or the construction thereof, of the rights, duties, or liabilities of either party shall be settled by arbitration in Union City, California in accordance with the rules of the American Arbitration Association (including Patent Arbitration Rules), and judgement upon the award rendered by the Arbitrator may be entered in any court having jurisdiction thereof.

## **SEVERABILITY**

18. Both parties hereby expressly agree and contract that it is the intention of neither party to violate any public policy, statutory or common laws; that if any sentence, paragraph, clause or combination of the same is in violation of any state or federal law, such sentences, paragraphs, clauses, or combinations of the same shall be inoperative and the remainder of this Agreement shall remain binding upon the parties hereto. It is the intention of both parties to make this Agreement binding only to the extent that it may be lawfully done under existing state and federal laws.

## **NEGATION OF AGENCY AND SIMILAR RELATIONSHIPS**

19. Nothing herein contained shall be deemed to create an agency, Joint Venture, or Partnership between the parties hereto.

## **EXISTENCE OF PRIOR AGREEMENTS**

20. Lessor warrants that no other license agreements or other similar business arrangements relating to the licensed patent are in effect during the term of this agreement.

## **ENTIRE AGREEMENT; MODIFICATIONS**

21. This Agreement constitutes the entire agreement and understanding between the parties and supersedes all prior agreements and understandings with respect to the licensed pagers whether written or oral. No modification or claimed waiver of any of the provisions hereof shall be valid unless in writing and signed by authorized representatives of the party against whom such a modification or waiver is sought to be enforced.

## **ASSIGNABILITY**

22. This Agreement and the rights and powers created herein may be assigned in whole or in part by the Licensee.

## **MAINTENANCE FEES**

23. Lessor agrees to pay all patent license fees in a timely manner as required by the US Patent & Trademark office and warrants that all necessary fees to keep the patent in force have been paid as required.

## **GOVERNING LAW**

24. This Agreement shall be construed and enforced, and the legal relations created herein shall be determined, in accordance with the laws of the State of California.

## **NOTICE**

25. All notices provided for in this Agreement shall be given in writing and shall be effective when either served by a personal delivery, or deposited, postage prepaid, in the United States Registered or Certified Mail addressed to the parties at their respective addresses hereinabove set forth, or to such other address or addresses as either party may later specify by written notice.

In witness whereof, the parties hereto have executed this Agreement in duplicate, each copy of which shall for all purpose be deemed an original.

## **VANIG GODOSHIAN**

By Tanig Godosheen

Date: March 19, 1993

STATE OF MICHIGAN  
COUNTY OF Oakland

**BEFORE ME**, the undersigned authority, on this day personally appeared Vanig Godoshian, who executed this Agreement for the purposes therein described.

Deborah M. Thompson  
Deborah M. Thompson  
Notary Public in and for  
State of Michigan  
My Commission Expires: 1/29/95

DANIEL HENDERSON

By Jeffrey  
Date 3/18/93

STATE OF CALIFORNIA  
COUNTY OF ALAMEDA

BEFORE ME, the undersigned authority, on this day personally appeared Daniel A. Henderson, who executed this Agreement for the purposes therein described.

**Notary Public in and for  
State of California**

2000-430 1993

## **APPENDIX J**

13C 14

516.

NEC - North America

4/9/93

- Spoke w/ JIM MARION - Manager

for the pager Engineering Dept. He said

he was not enthused about DTMF due to

problems with access thru PBX's, blocked pay

phones, etc. No one ever really discussed idea

very seriously. He offered no fm interference

for me - said that only those people / cos who

were persistent with Japan were successful

in creating a J.V. etc. as advise to me. Also, usually J.V.'s

were typically with some sort of cross-license arrangements.

He is calling Yoshimi Tomizawa - Shu (recently

married @ 516-753-7000 (fax) head of legal

department & speaks English. Pointed out that ~~he~~ this

was not intended to be adversarial - procedure required it

and generally NEC was reluctant to discuss much

with outsiders. Yoshimi will call me back after

JIM has chance today to make contact and ~~research~~

act for me. Also gave me name of Fernando

GOMEZ, Director of Subscribing Products - Americas

posting Product Division - (407) 364-2746 <sup>(NY)</sup> who

may be of assistance in directing my call to appropriate

decision makers.

I discussed only the DTMF part of our product and indicated that I had developed the one off dials. He and I both had same idea RE. preprogrammed radio for radio pagers, incidentally, and he thought my 1-# product was a great idea.

He went on to say that if a joint venture or license did not seem feasible, that I may be able to purchase the NEC chipset for a radiopaging receiver to implement into my own product or recommended that I contact Motorola @ their Boynton Beach, FL facility where they sell a preassemble board (radio receiver) - (407) 364-2748 that may allow an interface with other circuitry in our devices.

Very cordial, helpful. welcomed me to call again if I ~~to~~ have any difficulties.

4/22/93 Spoke with Yoshimi Tomizawa-Shu. She informed that they must have my signature on their doc. before we can proceed. I am awaiting for it by mail.

## **APPENDIX K**

**Innovad**  
**MUTUAL NON-DISCLOSURE AGREEMENT**

THIS AGREEMENT, made April 13, 1993, by and between INNOVAD, having an office at 33300 Mission Blvd, Ste. 131, Union City, CA 94587, and Mr. Drew Traver acting as agent for Doctor Design, Inc. having an office at 5415 Oberlin Drive, San Diego, CA 92121; and

WHEREAS, the parties wish to discuss the possibility of a design engineering contract between INNOVAD and Doctor Design, Inc.; and

WHEREAS, in connection with such discussions the parties will exchange certain information specifically relating to the auto-dialling paging receiver which is confidential, proprietary information of the disclosing party; and

WHEREAS, the parties wish to ensure that all such information is treated with special care to protect its confidential, proprietary nature.

NOW THEREFORE, in consideration of the mutual promises and covenants herein contained, the parties agree as follows:

1. Each party agrees that it will not disclose any confidential information of the other, as specified in this paragraph 1, subparagraphs A through D, to any person, or entity. If such information is in tangible form, it shall be returned to the disclosing party upon request.
  - A. All matters, information and plans, as well as the fact that discussions are taking place, and the identity of the parties involved, shall hereafter be held in confidence, treated as confidential information proprietary to the disclosing party and shall not be disclosed in whole or part to others, or reproduced or copied in whole or in part for any purpose, without the express written consent of the disclosing party.
  - B. Each party will regard and preserve as confidential all information related to the business of the other party. Each party shall not without first obtaining the written consent of the other, disclose to any person, firm or enterprise, or use for its benefit, any information relating to the pricing, methods, processes, financial data, lists, apparatus, statistics, programs research, development or related information of the other party, concerning past, present or future business activities of the other party.
  - C. Information shall not be deemed "confidential" for purposes of this paragraph 1 to the extent, that such information (1) was acquired by a

party hereto before the contemplated discussions and when such party was under no obligation to keep such information confidential, (2) is or becomes publicly known through no wrongful act of a party hereto, or (3) is received from a third person or entity who is legally entitled to possession of such information.

D. Each party further acknowledges and agrees that, in the event of a threatened breach of active breach by it of the provisions of the Agreement, the other party will have no adequate remedy for damages, and, accordingly, shall be entitled to an injunction against such threatened breach. However, no provision in this Agreement shall be construed as a waiver or prohibition of any other legal or equitable remedy for threatened or active breach hereof.

2. Neither party shall advertise, market or otherwise make known to others confidential information, as described in paragraph 1, learned from discussion, occurring pursuant to this Agreement, in a manner which attributes the information to or associates the information with the name of the other party, or its affiliated companies, partners, investors, subsidiaries, licensees, or any other entities.

3. Nothing contained in this Agreement shall be construed as granting or conferring upon a party hereto any proprietary right, by license or otherwise, in any confidential information disclosed by the other party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their authorized persons as of the date set forth below.

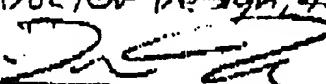
For NNOVAD:

By: 

Title: Owner

Date 4/20/93

For Doctor Design, Inc.

By: 

Title: Marketing Manager

Date: 4/20/93

NON-DISCLOSURE AGREEMENT 2 of 2

## **APPENDIX L**

**NEC**

NEC America, Inc.

NEC America, Inc.  
8 Old Sod Farm Road  
Melville, New York 11747-3112  
Tel. 516-753-7000  
Fax 516-753-7041

7050

7663

April 23, 1993

Mr. Dan Hendersen  
33300 Mission Boulevard  
Suite 131  
Union City, California 94587

Re: Submission of your idea to NEC America, Inc.

Dear Mr. Hendersen:

Per our telephone conversation last week, enclosed please find an agreement for your signature and notarization. NEC America, Inc. will not be able to engage in any discussion with you with respect to your idea until and unless you have executed, notarized and returned to my attention, the enclosed agreement.

Thank you very much for your interest in NEC America, Inc.

Sincerely,

*Yoshimi Tomizawa-Shu*

Yoshimi Tomizawa-Shu  
Attorney

X 7050

MTL Non-Disclosure

## ***Idea Submission Policy and Agreement***

We understand that you have a new idea which you think will be of interest to NEC America, Inc. (the "Company"). You should realize that an idea which is new to you may be old to us or may be in the public domain. Thus, we have found that good business practice requires a full explanation of the condition under which we can review your idea.

### ***1. Nonconfidential Disclosure***

The Company cannot agree to hold your new idea in confidence because it may be helpful to disclose the idea to others for evaluation, and because agreements to hold in confidence have been found to entail other obligations which the Company cannot accept. It is understood, therefore, that no confidential relationship is entered into by reason of the fact that the Company is considering your submission.

### ***2. No Obligations***

Any submission is made on the understanding that the Company shall give it such consideration as it merits in the sole judgment of the Company. The Company assumes no obligation to evaluate or pursue the idea, and is under no obligation to reveal to you any information of the Company. Also, the Company has no obligation to return the submitted materials to you.

### ***3. Title in New Idea***

The Company will consider your new idea submission only at your request, and then only with your assurance that to the best of your knowledge you are the sole originator of the new idea, that you own it and that you have the legal right to negotiate with the Company concerning it.

### ***4. Limited Rights to the New Idea***

It is agreed that in protecting your new idea you shall rely solely on your rights under the patent, trademark, and copyright laws, and that consideration of your submission by the Company shall in no way impair the Company's right to contest the validity of your patent, trademark, or copyright.

### ***5. No Compensation***

No agreement for compensation shall be implied by the consideration or review of your new idea. Should the Company decide after due consideration that your idea

is novel and previously unavailable to the public or the state of the art and of use to it, the extent of your compensation will be determined by a written agreement between yourself and the Company.

*Acceptance of the Policy and Agreement*

I have read the Idea Submission Policy set forth above and I agree to accept each of the conditions contained in the Policy and Agreement.

\_\_\_\_\_  
Signature

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Telephone: \_\_\_\_\_

Date: \_\_\_\_\_

State of \_\_\_\_\_

Date: \_\_\_\_\_

County of \_\_\_\_\_

I hereby certify that \_\_\_\_\_, personally known to the undersigned, appeared before me and acknowledged that he signed the attached submission as his free, voluntary act.

\_\_\_\_\_  
Notary Public

My commission expires:

## **APPENDIX M**

By Teletax: 619-457-1168

# Innovad

Innovative Development & Manufacturing

April 27, 1993

Mr. Drew Traver  
Doctor Design Inc.  
5415 Oberlin Drive  
San Diego, CA 92121-1716

Dear Drew:

Thank you for the hospitality you showed me during my visit. You were most helpful in acquainting me with the facility and the services which Doctor Design provides. Please give my regards to Hjamid.

I enjoyed visiting with you and look forward to developing a good working relationship with Doctor Design in the near future.

The patent information Marco requested was sent out today along with a brief letter. Please let me know if you require any further information.

After everyone has had a chance to review the materials and discuss our ideas internally I would like your help in responding with a proposal which will help get this project funded.

I look forward to a mutually rewarding relationship with you and Doctor Design Inc..

With Best Regards,



5/11/93

Dan Henderson

DAH:sbh

P.S. Thanks for Bob Hottos'#, we had a very productive discussion today that may lead to some interesting business opportunities. Thanks again!

skip-diving



Jack Robbins  
Sunrise-Walnut Creek  
or 690 Ignacio Blvd.  
or 190

## **APPENDIX N**

# Innovad

## MUTUAL NON-DISCLOSURE AGREEMENT

24  
THIS AGREEMENT, made April 23, 1993, by and between INNOVAD, having an office at 33300 Mission Blvd. Ste. 131, Union City, CA 94587, and Mr. Drew Trevor acting as an agent for Robert Hefeo having an office at 5415 Oberlin Drive, San Diego, CA 92121, and 3/09 Evening Way L. J. 92037

WHEREAS, the parties wish to discuss the possibility of a design engineering contract between INNOVAD and Robert Hefeo

WHEREAS, in connection with such discussions the parties will exchange certain information specifically relating to the auto-dialing paging receiver which is confidential, proprietary information of the disclosing party; and

WHEREAS, the parties wish to ensure that all such information is treated with special care to protect its confidential, proprietary nature.

NOW THEREFORE, in consideration of the mutual promises and covenants herein contained, the parties agree as follows:

1. Each party agrees that it will not disclose any confidential information of the other, as specified in this paragraph 1, subparagraphs A through D, to any person, or entity. If such information is in tangible form, it shall be returned to the disclosing party upon request.
  - A. All matters, information and plans, as well as the fact that discussions are taking place, and the identity of the parties involved, shall hereafter be held in confidence, treated as confidential information proprietary to the disclosing party and shall not be disclosed in whole or part to others, or reproduced or copied in whole or in part for any purpose, without the express written consent of the disclosing party.
  - B. Each party will regard and preserve as confidential all information related to the business of the other party. Each party shall not without first obtaining the written consent of the other, disclose to any person, firm or enterprise, or use for its benefit, any information relating to the pricing, methods, process, financial data, lists, apparatus, statistics, programs research, development or related information of the other party, concerning past, present or future business activities of the other party.
  - C. Information shall not be deemed "confidential" for purposes of this paragraph 1 to the extent, that such information (1) was acquired by a

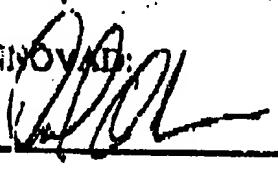
party hereto before the contemplated discussions and when such party was under no obligation to keep such information confidential, (2) is or becomes publicly known through no wrongful act of a party hereto, or (3) is received from a third person or entity who is legally entitled to possession of such information.

D. Each party further acknowledges and agrees that, in the event of a threatened breach of active breach by it of the provisions of the Agreement, the other party will have no adequate remedy for damages, and, accordingly, shall be entitled to an injunction against such threatened breach. However, no provision in this Agreement shall be construed as a waiver or prohibition of any other legal or equitable remedy for threatened or active breach hereof.

2. Neither party shall advertise, market or otherwise make known to others confidential information, as described in paragraph 1, learned from discussion, occurring pursuant to this Agreement, in a manner which attributes the information to or associates the information with the name of the other party, or its affiliated companies, partners, investors, subsidiaries, licensees, or any other entities.

3. Nothing contained in this Agreement shall be construed as granting or conferring upon a party hereto any proprietary right, by license or otherwise, in any confidential information disclosed by the other party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their authorized persons as of the date set forth below.

For INNOVAD:  
  
By: \_\_\_\_\_  
Title: Owner  
Date: 4/28/93

For Positive Technologies  
By: John P. K.  
Title: President  
Date: 4/28/93

## **APPENDIX O**

## [54] TELEPHONE ANSWERING SYSTEM WITH PAGING FUNCTION

4,336,524 6/1982 Levine ..... 340/311.1  
 4,682,148 7/1987 Ichikawa et al. ..... 340/311.1

[75] Inventor: Kazuo Hashimoto, Tokyo, Japan

Primary Examiner—Robert Lev  
 Attorney, Agent, or Firm—Lowe, Price, LeBlanc,  
 Becker & Shur

[73] Assignee: Hashimoto Corporation, Tokyo, Japan

[21] Appl. No.: 841,097

[22] Filed: Mar. 18, 1986

## [30] Foreign Application Priority Data

Mar. 19, 1985 (JP) Japan ..... 60-55225

MO4Q 7/04

[51] Int. Cl. 4 ..... 379/57; 79/51;  
 [52] U.S. Cl. ..... 340/825.44[38] Field of Search ..... 179/2 E, 2 EA, 2 B,  
 179/18 BE, 18 BF, 84 UF, 2 G, 603; 370/61;  
 340/825.44, 311.1; 379/57, 51

## [56] References Cited

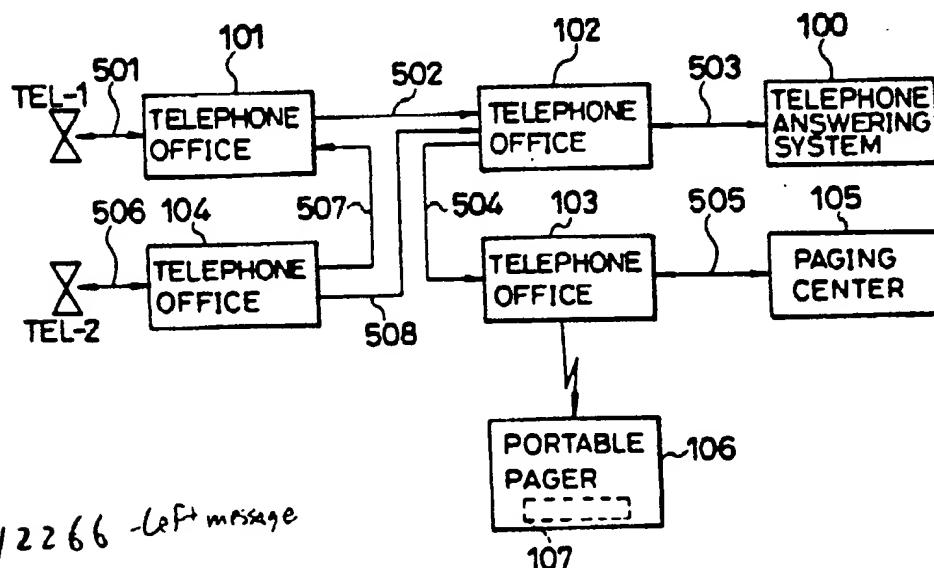
## U.S. PATENT DOCUMENTS

4,063,642 12/1977 McClure ..... 379/77  
 4,072,824 2/1978 Phillips ..... 379/57  
 4,178,475 12/1979 Taylor et al. ..... 179/2 EC  
 4,313,035 1/1982 Jordan et al. ..... 179/18 BE

## [57] ABSTRACT

A telephone answering system with paging function is adapted to transmit a prerecorded outgoing message to a calling party through a closed loop of telephone lines established upon reception or a telephone calling signal, and record an incoming message from the calling party after the outgoing message is transmitted. The system operates to receive a signal representative of the caller's telephone number sent from the calling party through the telephone lines to store the same signal in a memory, and then automatically and temporarily release the closed loop, and thereafter reestablish the closed loop for calling a preset telephone number of a paging center. Further, the system transmits the stored signal representing the caller's telephone number to the paging center through the telephone lines upon reception of an answer from the center.

6 Claims, 5 Drawing Sheets



011 81 3  
 • 342/2266 - left message

34223749

## **APPENDIX P**



# AT&T's Customer Information Center

2855 N. Franklin Road  
Indianapolis, IN 46219-1385  
FAX: (317) 322-6549

**TO: NAME** DANIEL HENKISON

**LOCATION** \_\_\_\_\_

**PHONE NUMBER** (510) 487-6702

**FAX NUMBER** (510) 487-2285

**FROM: NAME** JERRY SAEFOLK

**LOCATION** AT&T / CICS

**PHONE NUMBER** 317 322 6471

**NUMBER OF PAGES** 3 MAILING COVER SHEET

**DATE** \_\_\_\_\_

Please contact Sender if transmission is not completed.

**COMMENTS:**

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IND 03-01  
11-6-93

## SEARCH THE DATABASE

To log onto the CIC On-Line Catalog, you must have an assigned Login ID. If you do not have a Login ID, please call 317-322-6491.

To log on to the database, follow the instructions below. The CIC Catalog will automatically be accessed when login is complete.

### DATAKIT® Users

At the Destination prompt, enter:

(600)645-6759

You will be prompted for your login name/cic/cicnet.1.terminal.. sounds Upon connecting, you will be prompted to enter your login ID, password, and terminal type. Acceptable terminal types include 4410, VT100, 5425, ANSI, TTY, Kapto, TE, P7510 and many others. If you have questions about your terminal, please call 317-322-6491.

Be sure your Caps Lock and Num Lock keys are off!

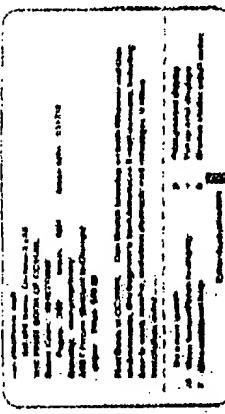
## SEARCH THE SYSTEM

After logging in, the first screen displayed is the main function screen. You begin your keyword search at this screen and return to this screen to do new searches. At the prompt you type in search items. To illustrate, let's assume we are searching for document listings about electronic mail. After typing in the words, press the RETURN key.

The system will locate all documents that have both the word electronic and mail in either the title or description. The key words do not have to be in specific order, nor even in the same sentence. In this instance, the system has located six document listings that have the words electronic and mail. (These are some listings from the screen case hold, pressing the RETURN key repeatedly will automatically scroll you forward through the listings.)

To see the full record for a document, simply type the record number (1-6 in the example above) followed by the return key.

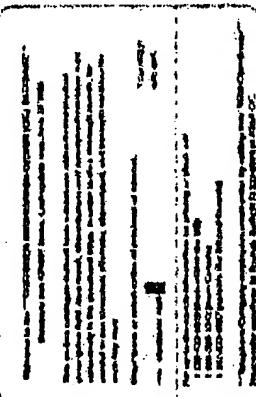
Note: The selections below the dasheline reflect the commands you can use to maneuver through the screens. See opposite page for descriptions of commands.



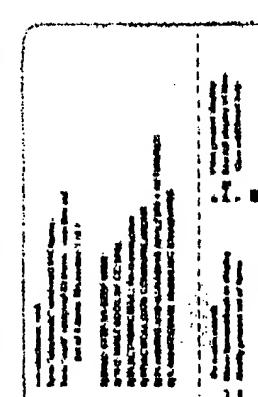
To start a new search, type a period ". " to return to original screen.



In the previous example, the phrase electronic mail was used. If we had typed electronic only, the screen would have been like the one to the left, retrieving 814 documents for viewing. The set can be reduced by adding additional terms—one or more at a time—and pressing the return key after each.



Type a followed by a carriage return, anywhere in the system to log out. The system will ask for any comments you might have about the On-Line Catalog. If you choose to comment, typing a PERIOD ". " on a separate line will end your session. If you choose not to comment, you can best type the PERIOD ". " followed by the return key.



Return to main screen to start a new search.

Move forward/back in display. The sign can be followed by a number to move forward or backward a specific number of screens. Press the RETURN key will also advance you in the display.

Modify present display. This command will take you back to screen #4 (see above) where you can reduce the set by adding key words.

Print present display...this command does not work

Type in record number and press return to see full display of item.

Give additional help. This command illuminates a screen that explains the commands at the bottom of the screen and explains how to exit the system.

Put up brief displays. This command is used when you are looking at a full record and would like to return to the abbreviated listings of documents.

Quit

Ctrl 1 Redraw screen

All commands must be followed by the RETURN key.



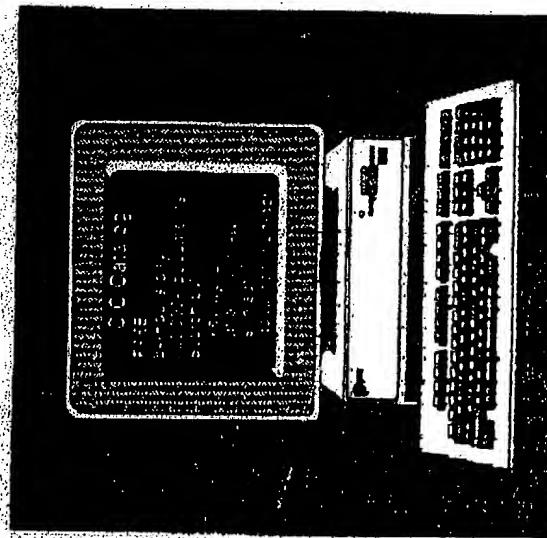
卷之三

Use the truncation “? symbol to retrieve all key words beginning with a specific string of characters. For example, the term *admin*? will return all key words starting with *admin* including Administrator, administration, Administrator, etc.

The “?” symbol can also be used as a wildcard character where spelling of a term is uncertain. For example, *me?nd* would retrieve man, men, man, men, etc.

Use the file's search or range of numbers. For example: 22500000 - 23000111 will retrieve all documentings that have

## **ESTATE PLANNING GUIDE ON-LINE COURSE**



Customer Information Center  
On-Line Catalog

To receive a Login ID, call  
**1-800-432-6600**  
please have your  
**Ring Information available**

Welcome to AT&T's Customer Information Center (CIC) On-Line Catalog. We hope that you will find the On-Line Catalog easy and convenient to use.

The CEC On-Line Catalog is comprised of over 380,000 document listings including AT&T Practices, product manuals, engineering drawings, user guides, installation manuals, books, brochures, newsletters, telephone directories, and many miscellaneous items.

This guide provides general information about the CIC On-Line Catalog, as well as step-by-step instructions on using the database to find exactly what you need. You will find the On-Line Catalog to be easy to use once you've mastered just a few simple commands.

## **APPENDIX Q**

**DOCTOR DESIGN INC.**  
**Engineering Services Quotation**

This Engineering Services Quotation is provided by Doctor Design, Inc. (hereafter referred to as "DDI") to Innovad (hereafter referred to as "Company").

**Statement of Work**

DDI shall be engaged by Company as an independent contractor. This engagement consists of quickly prototyping a low functionality unit of Company's intelligent pager product (hereafter referred to as "Project"). DDI shall complete the Project to the requirements of this Statement of Work and Technical Specifications (if supplied) and/or other information provided by Company. If desired, Company shall provide a detailed Statement of Work and Technical Specification prior to the start of work. The Fees and Schedule quotations are based on the following assumptions:

- DDI will modify an off the shelf pager to incorporate an auto dialer.
- Design will have a single button for dialing.
- DDI will locate off the shelf packaging for prototype unit.
- DDI will write software need to support auto dialing.
- Three assembled and tested prototypes will be delivered to Company, one assembled and tested prototype and one bare printed circuit board will be retained by DDI.

**Company Deliverables**

Company shall provide all unique equipment required for prototype testing and debug for the Project. This will include:

- Four (4) off the shelf pager units to be modified.
- Activation for all pager units.
- Technical contact for questions

Company shall provide DDI with an Acceptance Test Plan (ATP) within 2 weeks after start of project. Prototype or production parts which pass the ATP shall be deemed accepted by Company.

**DDI Deliverables**

**PRINTED CIRCUIT BOARDS** -- DDI will deliver provide three (3) tested and working prototypes in enclosures to Company.

## Fees and Schedule

This proposal is good until 5/28/93

Schedule:	Start Project	0 weeks ARO	Net 0	\$ 9,000
	Design Review	2 weeks ARO	Net 15	\$ 8,000
	Deliverables	5 weeks ARO	Net 15	\$ 8,000
Total Project NRE				\$25,000

Prototype estimate is detailed on the estimate worksheet contained in Exhibit A.

Prototype Estimate	2 weeks ARO	Net 0	\$ 3,000
--------------------	-------------	-------	----------

\$20k

\* If actual prototype cost exceeds estimated cost, excess will be billed monthly Net 0. If estimated prototype cost exceeds actual cost, excess will be refunded at end of project.

\*\* If any DDI technician time is used for prototype assembly, it will be billed at \$75 per hour.

\*\*\* Shipping cost of sending prototypes to Company will be billed directly to Company by shipper.

\*\*\*\* Payment terms are subject to credit approval.

\*\*\*\*\* Work will not begin until start payment is received. If DDI agrees to begin work with a PO# and not a start payment, work will begin three (3) working days after receipt of PO.

All payments received after the payment due date will accrue interest at the rate of one and one-half percent (1½%) per month.

## Changes

DDI will use its best efforts to implement any changes and/or modifications to the technical specification after start of the Project. When Company requests a change, the Project will be placed on hold and investigation into the amount of time required to make changes will be performed on an hourly basis at the rate of \$85 per hour. A written estimate covering extra design NRE, schedule changes, additional prototype costs and estimated recurring costs will be given to Company at the end of the investigation. Upon receipt of Company's written acceptance or rejection, DDI will again start working on a fixed cost basis. All milestones in the current fixed contract will adjust for the amount of time spent in investigation and waiting for Company's acceptance or rejection. DDI shall

not be responsible for any delays caused by time spent investigating Company's requested changes or waiting for Companys response.

### **Warranty**

DDI will warrant that the design and final product is free from defects and meets technical specifications as measured by the ATP for 90 days from the date of delivery to Company. This warranty does not apply if modifications are made that were not designed by DDI. If Company has isolated a repeatable problem in DDI designed sections, DDI will fix the problem at no charge to Company. Time invested by DDI to help Company isolate problems will be billed at \$85 per hour. This charge will apply regardless of whether the problem lies in DDI designed sections or in sections designed by others. Company will pay for any and all shipping charges.

### **Termination**

This project may be terminated by written notice from the Company. Should the project be terminated after an authorization to start work, all project fees up to and including the next project milestone and any prototype expenses incurred are due and payable.

### **Ownership of Project**

DDI agrees that all technology, schematics, specifications, designs and any other deliverables under this agreement are the property of Company upon payment in full, within terms, of all milestone, prototype expenses and other invoices submitted by DDI under this agreement. Company agrees that all technology, schematics, specifications, designs and any other deliverables under this agreement are the property of DDI until all invoices have been paid in full; this is in addition to any other remedies available to DDI.

### **Relationship of the Parties**

The parties intend that DDI shall be an independent contractor and not an agent or employee of Company. DDI adheres to all laws and ethical standards applicable to professional engineers and performs in a manner consistent with generally accepted procedures for the profession. DDI acknowledges this design is "work for hire" under the laws of the State of California, and DDI, or its employees or sub-contractors retain no ownership rights to the design.

### **Severability**

If any provision of this Agreement shall be held to be invalid, the other provisions shall remain enforceable unless deletion of the invalid material will defeat the essential purpose of the parties as expressed in this Agreement.

**Indemnity**

Company agrees to indemnify, hold harmless and defend DDI, its employees and subcontractors from all liability for any loss, damage or injury to persons or property arising from or related to the performance of this agreement whether liability be based on strict liability in connection with the design, manufacture or use of the System, including without limitation all consequential damages whether or not attributable to DDI, its employees or subcontractors. The terms of this agreement shall bind and inure to the benefit of the parties and their heirs, legal representatives, successors and assigns.

**Authority**

The parties executing this Agreement on behalf of DDI and Company warrant that they have the authority to enter into this Agreement and to bind their respective company to all of the terms and conditions of this Agreement.

**Governing Law**

This Agreement shall be governed and construed by and in accordance with the laws of the State of California.

**Arbitration**

Any dispute relating to the interpretation or performance of this agreement shall be resolved at the request of either party through binding arbitration. Arbitration shall be in accordance with the rules of commercial arbitration of the American Arbitration Association before a single arbitrator in San Diego, California. Judgment upon any award by the arbitrators may be entered by the state or federal court having jurisdiction. The parties intend that this agreement to arbitrate be irrevocable.

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Company

---

Company

---

Name (Print)

---

Name (Print)

---

Signature

---

Signature

---

Title

---

Title

---

Date

---

Date

## EXHIBIT A

### DDI Prototyping Methodology

DDI has included the following prototyping services:

- Printed Circuit Board Layout and Routing (PCB LAYOUT)
- Printed Circuit Board Fabrication (PCB FAB)
- Component Purchasing and Kitting (PURCHASING & KITTING)
- Printed Circuit Board Assembly (ASSEMBLY)
- Management and Expediting of all of the Above Services

#### WHAT WE NEED FROM THE CUSTOMER:

For best results, the customer should provide DDI with as much information regarding the eventual manufacturing process as is possible. This will allow us to design a printed circuit board which is easily transferred to the customer's manufacturing facility for volume production. Some of the information which would be helpful includes:

- Manufacturing Technology -- Through hole or Surface Mount?
- Hand Insertion or Auto Insertion -- What auto insertion rules to design to? *Motorola*
- Approved Vendors List -- What families and vendors of components are *Motorola* already on the customers approved vendor list?
- "Design for Manufacturability" -- Any other rules the customer wants followed in the design of the printed circuit board. *Same as Motorola*

#### DETAILS OF THE SERVICES

##### Printed Circuit Layout and Routing (PCB LAYOUT)

DDI will manage a third party firm which specializes in layout and routing. We will provide guidance in critical routing restrictions, layer count, manufacturing constraints and other guidelines necessary to successful completion. We will check photo-plots, and provide engineering feedback to the routing process.

At DDI's option, DDI may use in-house resources to layout and route PCB's. This service will be charged at industry-standard rates as a prototyping expense.

##### Printed Circuit Board Fabrication (PCB FAB)

DDI will select a vendor suited to the printed circuit board to be fabricated. We will evaluate number of layers, density, number of holes, line widths and spacing, size of board and turnaround time requirements, to select the vendor best suited to the project. We will expedite the manufacturing process and monitor the vendor's progress.

**Component Purchasing, Receiving and Kitting (PURCHASING & KITTING)**

DDI, using in-house resources, will order components from qualified vendors and distributors, receive components, and kit for assembly. We will also follow up on missing or late items with the vendors.

**Printed Circuit Board Assembly (ASSEMBLY)**

DDI will deliver the component kits to a third party firm which has been selected specifically to meet the requirements of the project.

**STANDARD TERMS AND CONDITIONS FOR PROTOTYPING SERVICES****Charges:**

All outside prototyping costs have a 35% Gross Margin. This includes:

PCB Layout and Film

PCB Fabrication, Test and Tooling

Component Cost

Assembly and Tooling

Internal clerical costs for purchasing, receiving and kitting are billed at \$350.00/day.

**Quantities:**

Our standard terms and conditions for turnkey prototyping includes fabrication of 5 bare PCB's. Four (4) of these units will be assembled for testing. DDI will deliver 3 tested units to the customer, and retain one tested unit and one bare PCB for reference and support.

**NOTE THAT THIS PROJECT HAS BEEN QUOTED WITH THE ASSUMPTION THAT 4 UNITS WILL BE TESTED.** If additional units are requested, the additional engineering cost per board identified below is due upon delivery of working prototype boards. This engineering cost covers testing of additional boards. Cost of additional PCBs, components, and assembly will be based on actual prototype costs.

	STANDARD TERMS	SPECIAL TERMS
Bare Printed Circuit Boards Fabricated	5	____
Total Assembled Units to be Tested	4	____
Total Assembled Units to be Delivered	3	____

AMOUNT TO BE ADDED TO ENGINEERING BID  
FOR EACH ADDITIONAL UNIT DELIVERED

\$ \_\_\_\_\_

#### **PAYMENT SCHEDULE FOR PROTOTYPING PROJECTS:**

Because prototyping costs are derived from outside services, and are accrued rapidly on a quick turn project, the entire amount of the estimate is due up front to begin the prototyping. The refund or additional charges will be computed when the prototyping is completed, and these charges must be paid net 30 days.

#### **GENERAL NOTES ON THE PROTOTYPING PROCESS:**

The purpose of the prototype process is to validate and demonstrate a new hardware design. The "prototype" which emerges from this process will be a combination of the original design, and the changes which were made to the design in the process of hardware "debugging".

Depending on the complexity of the design, these design changes may involve programmable logic changes, "cut and jump" wiring changes, layout and routing changes and other mechanical constraint changes such as connector placement.

After the debug process, our customer typically submits the hardware design to various environmental tests. This will include UL/CSA/VDE/FCC/COLA and other regulatory and safety qualifications. The customer will also submit the hardware to integration with mechanical components such as chassis, power supplies, monitors...etc. The result of all of this testing typically includes changes to the Printed Circuit Board above and beyond the "wiring" changes isolated in hardware debug.

Our customer typically takes control of the engineering documentation for a product immediately after the prototype hardware is debugged. This allows the customer to be in control of the final revision of the printed circuit board (if another revision is required). At this time, the customer's manufacturing group can make final minor manufacturability changes, and incorporate any changes from the testing mentioned above.

If requested, DDI will be available to handle the PILOT MANUFACTURING run of boards. We can make the changes mentioned in the preceding paragraph. We will quote this, when requested, as a completely separate project. Depending on the quantity of units requested in this "second run", this quote will include all of the steps of the prototype project, plus engineering and technician time for debugging pilot units.

## PROTOTYPING PROJECT ESTIMATE WORKSHEET

Customer Name: \_\_\_\_\_  
Project Name: \_\_\_\_\_  
Estimate Date: \_\_\_\_\_  
Estimator: \_\_\_\_\_

**PCB LAYOUT** \$ \_\_\_\_\_ (1)

Assumes \_ week layout \_\_\_\_\_  
\_\_\_\_\_

**PCB FABRICATION** \$ \_\_\_\_\_ (2)

Assumes \_\_\_\_\_  
\_\_\_\_\_

**COMPONENT COST** \$ \_\_\_\_\_ (3)

Assumes \_\_\_\_\_  
\_\_\_\_\_

**ASSEMBLY** \$ \_\_\_\_\_ (4)

Assumes \_\_\_\_\_  
\_\_\_\_\_

**VERIFICATION/CERTIFICATION** \$ \_\_\_\_\_ (5)

Assumes \_\_\_\_\_  
\_\_\_\_\_

**COSTS (LINES 1+2+3+4+5)** \$ \_\_\_\_\_ (6)

**COST PLUS 35% GROSS MARGIN (LINE 6 / .65)** \$ \_\_\_\_\_ (7)

**PURCHASING LABOR ESTIMATE** \$ \_\_\_\_\_ (8)

**RECEIVING AND KITTING LABOR ESTIMATE** \$ \_\_\_\_\_ (9)

**ESTIMATE TOTAL (LINES 7+8+9)** \$ \_\_\_\_\_ (10)

**NOTE THAT THIS IS AN ESTIMATE ONLY.**

Actual Invoices will track actual costs.

Sales Tax may be required.

**DOCTOR DESIGN INC.  
CREDIT APPLICATION****BY:**

---

NAME OF COMPANY

---

ADDRESS

YEARS AT ADDRESS

---

CITY

STATE

ZIP

AREA CODE

PHONE

The following information must be provided. It will be held in the strictest confidence.

**OWNERSHIP:**

<input type="checkbox"/> Corporation	<input type="checkbox"/> Check here if incorporated within the past 12 months
<input type="checkbox"/> Partnership	<input type="checkbox"/> Individual

1.

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NAME(S) OF PRINCIPALS(S)

ADDRESS

PHONE

2.

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3.

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**FINANCE:**

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BANK

BANK ADDRESS

PHONE

---

ACCOUNT NUMBERS

---

BANK

BANK ADDRESS

PHONE

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ACCOUNT NUMBERS

**REFERENCES:**

1.	BUSINESS NAME	ADDRESS	ZIP	PHONE
	ACCOUNT NUMBER			
2.	BUSINESS NAME	ADDRESS	ZIP	PHONE
	ACCOUNT NUMBER			
3.	BUSINESS NAME	ADDRESS	ZIP	PHONE
	ACCOUNT NUMBER			

**CONTACTS:**

Purchase Order Required

PURCHASING CONTACT	PHONE
ACCOUNTS PAYABLE CONTACT	PHONE

If purchasing goods for resale, please provide reseller's certificate number:

**ACCEPTANCE:**

We certify that all the information on this form is correct. We fully understand your credit terms and agree to the proper payment in consideration of extended credit.

SIGNED	DATE
NAME PRINT	TITLE

## **APPENDIX R**

**INNOVAD**  
**MUTUAL NON-DISCLOSURE AGREEMENT**

THIS AGREEMENT, made 05/24/93, by and between INNOVAD, having an office at 33300 Mission Blvd. Ste. 131, Union City, CA 94587, and

HASHIMOTO CORPORATION having an office at 285 Sea Cliff, San Francisco, CA.

WHEREAS, the parties wish to discuss the possibility of a License Agreement between HASHIMOTO CORPORATION and INNOVAD; and

WHEREAS, in connection with such discussions the parties will exchange certain information specifically relating to the **Radio Frequency Auto Dialer** which is confidential, proprietary information of the disclosing party; and

WHEREAS, the parties wish to ensure that all such information is treated with special care to protect its confidential, proprietary nature.

NOW THEREFORE, in consideration of the mutual promises and covenants herein contained, the parties agree as follows:

1. Each party agrees that it will not disclose any confidential information of the other, as specified in this paragraph 1, subparagraphs A through D, to any person, or entity. If such information is in tangible form, it shall be returned to the disclosing party upon request.

A. All matters, information and plans, as well as the fact that discussions are taking place, and the identity of the parties involved, shall hereafter be held in confidence, treated as confidential information proprietary to the disclosing party and shall not be disclosed in whole or part to others, or reproduced or copied in whole or in part for any purpose, without the express written consent of the disclosing party.

B. Each party will regard and preserve as confidential all information related to the business of the other party. Each party shall not without first obtaining the written consent of the other, disclose to any person, firm or enterprise, or use for its benefit, any information relating to the pricing, methods, process, financial data, lists, apparatus, statistics, programs research, development or related information of the other party, concerning past, present or future business activities of the other party.

C. Information shall not be deemed "confidential" for purposes of this paragraph 1 to the extent, that such information (1) was acquired by a party hereto before the contemplated discussions and when such party was under no obligation to keep such information confidential, (2) is or becomes publicly known through no wrongful act of a party hereto, or (3) is received from a third person or entity who is legally entitled to possession of such information.

D. Each party further acknowledges and agrees that, in the event of a threatened breach or active breach by it of the provisions of the Agreement, the other party will have no adequate remedy for damages, and, accordingly, shall be entitled to an injunction against such threatened breach. However, no provision in this Agreement shall be construed as a waiver or prohibition of any other legal or equitable remedy for threatened or active breach hereof.

2. Neither party shall advertise, market or otherwise make known to others confidential information, as described in paragraph 1, learned from discussion, occurring pursuant to this Agreement, in a manner which attributes the information to or associates the information with the name of the other party, its parent, subsidiary, or affiliated corporations, without the prior written consent of the party.
3. Nothing contained in this Agreement shall be construed as granting or conferring upon a party hereto any proprietary right, by license or otherwise, in any confidential information disclosed by the other party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their authorized persons as of the date set forth below.

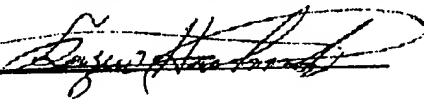
For INNOVAD:

By: 

Title: Owner-Innovad

Date: May 24 1993

For HASHIMOTO CORPORATION

By: 

Title: \_\_\_\_\_

Date: May 24 1993

## **APPENDIX S**

Henderson  
File

Date: Sat May 29, 1993 1:27 pm (ET)  
To: Mr. Kazuo Hashimoto  
Destination Fax: 415-751-1840  
From: Dan A. Henderson/INNOVAD  
Subject: Meeting on Monday

Number of pages excluding cover page: 0.5

Number of delivery attempts: 2

U.S.P. 4882,750

U.S.P 4,821,308 (KH- 802)

Calling } 150 / month 300  
} 40 \$ / delivery 2400 \$  
} 8 \$ / month

Newstein

This facsimile message was electronically transmitted by MCI Mail®

Call 800-444-6245 (in the U.S.) for information

Dear Mr. Hashimoto:

Thank you for talking with me earlier this week regarding my project and the possibility of licensing your patents.

I consider it a real pleasure to meet you - our meeting has inspired me to even harder in my career as an inventor.

You will receive a formal letter from me by mail, but I did not want you to wait to receive my appreciation for your interest in me and my project.

I look forward to speaking with you again.

With much respect and admiration.

Daniel Henderson

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## **APPENDIX T**

# Innovad

Innovative Development & Manufacturing

June 17, 1993

Mr. Kazuo Hashimoto  
Hashimoto Corporation  
285 Sea Cliff  
San Francisco, CA

Dear Mr. Hashimoto:

Thank you for helping me with the autodialing pocket bell invention that we discussed today. I will be meeting with investors at the end of this month. License rights to your patent will help me raise money more quickly for the prototype development.

Enclosed is a short letter of understanding for license rights to your US Patents 4,821,308 and 4,882,744 and US Patent 4,065,642 issued to McClure ( attached for your reference ).

My understanding is that you are willing to license me under these patents for one year, renewable on a year by year basis. You also mentioned that you would allow me exclusive license rights for the first 6 months of our agreement. I understand that we can discuss exclusive license rights beyond the first 6 months upon completion of a working prototype and satisfactory progress made by me.

I also understand that I am obligated to show you a working prototype as soon as it is completed.

I will call you in a few days to confirm that the attached letter of understanding is acceptable to you.

Also, I am studying the materials you loaned to me regarding the Irvine cellular phone company - I will return the materials to you with my recommendations by Tuesday of next week.

With Best Regards,



Dan Henderson  
Inventor

Attachment - Letter of Understanding - License Agreement.

## **APPENDIX U**

SENT BY:

19-93 12:47PM :kinko's - Haywar A→

4155675872 # 1 / 8

# Innovad

Innovative Development & Manufacturing

Saturday, June 19, 1993

FACSIMILE TO (415) 751-1840

Mr. Kazuo Hashimoto  
Hashimoto Corporation  
285 Sea Cliff  
San Francisco, CA

*Mr. Guretz*

Dear Mr. Hashimoto:

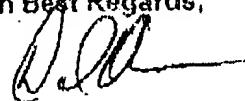
I have completed studying the documents you lent to me. It appears that some of GlobalLink technology may be useful for my planned pager product. Mr. Tom Hashimoto and I will meet with them on June 22 at 1:30 to learn more about what they have.

I sent the GlobalLink documents to him by Federal Express on Friday June 18. You will receive another copy of the documents by US Mail next week.

Attached are patents that may be helpful to you regarding the GlobalLink Company. I searched up to 1992 databases and found two design patents assigned to Universal Cellular Inc.. I also searched for patents issued to James Wohl, Lawrence Gach, and Ted Naugler of Universal Cellular Inc. but did not find anything further.

I look forward to speaking with you after the meeting Tuesday to discuss GlobalLink and the License agreement you received from me last Friday.

With Best Regards,



Dan Henderson

Attachments ( seven )

United States Patent [19]  
Freeland et al.

[11] Patent Number: 5,148,473  
[45] Date of Patent: Sep. 15, 1992

[54] PAGER AND RADIOTELPHONE APPARATUS

[75] Inventors: Joseph C. Freeland, Lindenhurst; David M. Hess, Elgin, both of Ill.  
[73] Assignee: Motorola, Inc., Schaumburg, Ill.  
[21] Appl. No.: 773,759  
[22] Filed: Oct. 15, 1991

Related U.S. Application Data

[63] Continuation of Ser. No. 515,473, Aug. 30, 1991, abandoned.  
[51] Int. Cl. 3 H04M 11/00  
[52] U.S. Cl. 379/39; 379/98; 379/37  
[58] Field of Search 379/37, 58, 59, 61; 340/825.44

[56] References Cited

U.S. PATENT DOCUMENTS

4,412,217 10/1983 Willard et al. 340/825.44  
4,575,582 3/1986 Makino 340/825.44  
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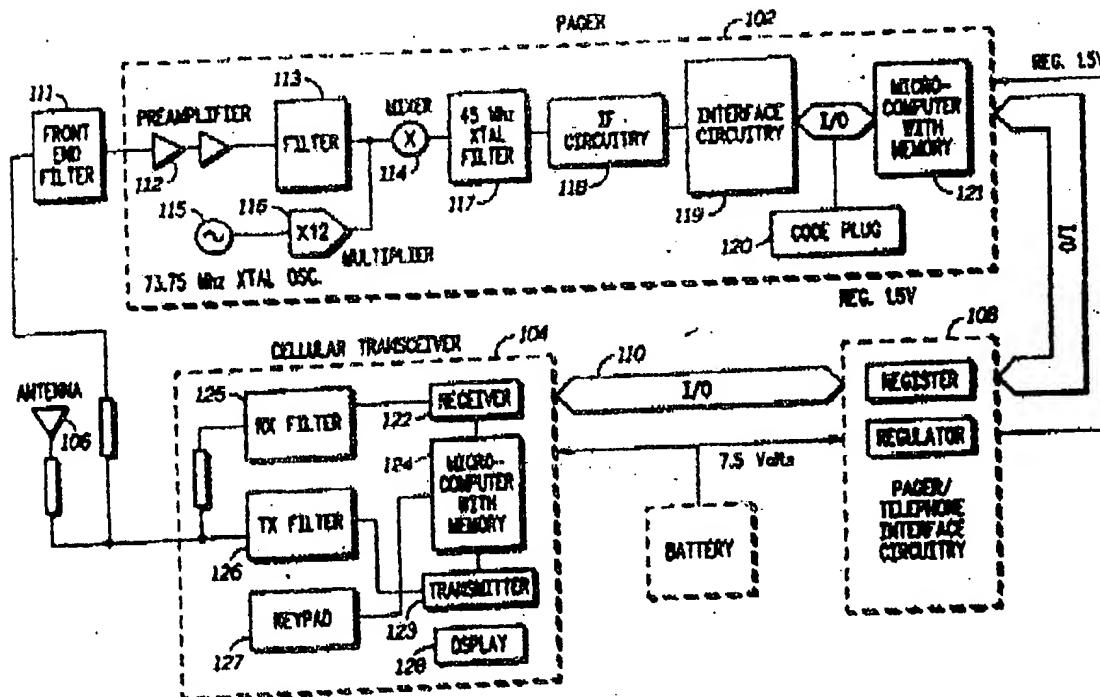
Financial Times article, "Designs on Pocketing the Cellular Market", by Geoffrey Charlish, Dec. 11, 1987. Published German Application DE3329267, by Klinzel, Feb. 1985 (379-58).

Primary Examiner—James L. Dwyer  
Assistant Examiner—Dwayne D. Bost  
Attorney, Agent, or Firm—Kenneth W. Bolvin

[57] ABSTRACT

The present invention encompasses a pager and radiotelephone apparatus (100) having a radio pager section (102) and a cellular radiotelephone section (104) into one unit. The apparatus (100) may automatically receive a plurality of pages while the cellular radiotelephone section (104) is on, communicating a cellular telephone call, or off and unattended. The received pages are stored in the pager section (102) until the apparatus user acknowledges their receipt by a key-stroke. The pages are then transferred to the radiotelephone section (104) and stored in non-volatile memory for later use.

5 Claims, 3 Drawing Sheets



5,148,473

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stored in the non-volatile memory will remain for later recall. If the RCL pushbutton was activated, the scratchpad memory will be displayed but not called. Different location in the scratchpad memory can be recalled by activating the RCL pushbutton followed by a numeric pushbutton.

Once all the page data is moved out of the pager section (102), the PAGER ON/OFF line is pulsed high momentarily by the 68HC11 microcomputer (124) to toggle the D flip flop (301), thereby turning the pager section (102) off. This clears the pages stored in the pager section's microcomputer (121). The PAGER ON/OFF line is pulsed again to turn the pager section (103) back on.

One skilled in the art will know that various aspects of the present invention can be changed while still remaining within the scope of the invention. These changes may include the number of pages stored in the microcomputer stack, the number of telephone numbers stored in the radiotelephone section, and the time the radiotelephone section remains on. In summary, a combination radiotelephone/pager apparatus has been shown that permits operation in both radiotelephone and paging systems.

We claim:

1. A method for controlling a combination pager and radiotelephone apparatus, the combination pager and radiotelephone apparatus including pager means for receiving on a paging radio channel a plurality of radio paging signals each having a telephone number with at least one digit, and the combination pager and radiotelephone apparatus including cellular transceiver means being coupled to the pager means through an interface circuit and having at least a recall and send pushbutton for transmitting on radiotelephone channels radiotelephone call signals, the interface circuit having a register for storing the telephone numbers, the method comprising the steps of:

receiving and storing in the paging means a plurality of radio paging signals each having a telephone number with at least one digit;

producing an indication signal when each paging signal has been received in the paging means;

moving the stored telephone numbers from the paging means into the register in response to a control signal;

counting in the cellular transceiver means, in response to the indication signal, the number of paging signals received;

generating the control signal in response to activation of the recall or send pushbutton;

moving the stored telephone numbers from the register to the cellular transceiver means; and

transmitting, in response to activation of the send pushbutton, radiotelephone call signals using the

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last received read-out telephone number in the cellular transceiver means.

2. A pager and radiotelephone apparatus for communicating radiotelephone call signals on radiotelephone channels and receiving paging signals on a paging radio channel, the pager and radiotelephone apparatus comprising:

an antenna for receiving the paging signals and communicating the radiotelephone call signals;

10 pager means having first filter means coupled to the antenna for receiving paging signals on the paging radio channel and having memory means for storing the received paging signals, each paging signal having a telephone number with at least one digit, the pager means further providing an indication signal when each paging signal has been received, and the pager means being responsive to a first control signal for reading out the stored telephone numbers and being responsive to a second control signal for clearing the memory means;

15 cellular transceiver means coupled to the pager means, having at least a send pushbutton and a recall pushbutton, and having second filter means coupled to the antenna for receiving radiotelephone call signals on the cellular radio channels, the cellular transceiver means responsive to each indication signal for counting the number of paging signals received, and the cellular transceiver means responsive to activation of the recall pushbutton for generating the first control signal to enable the pager means to read out from the memory means the counted number of stored telephone numbers and thereafter generating the second control signal to enable the pager means to clear the memory means, and the cellular transceiver means responsive to activation of the send pushbutton for transmitting radiotelephone call signals using one of the read out telephone numbers;

20 a power source for generating a predetermined voltage to power the cellular transceiver means; and interface circuitry, connected to the pager means, the cellular transceiver means, and the power source, the interface circuitry having regulation means for regulating the predetermined voltage to a lower voltage to power the pager means, the interface circuitry additionally having a memory register for temporarily storing the telephone numbers read out from the memory means.

3. The apparatus of claim 2 wherein the antenna is 25 coupled to the first filter means by a transmission line.

4. The apparatus of claim 2 wherein the antenna is coupled to the second filter means by a transmission line.

5. The apparatus of claim 2 wherein the second filter means includes a receive filter and a transmit filter, each filter being coupled to the antenna by a separate transmission line.

\* \* \* \* \*

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US05175798A

## United States Patent [19]

Levanto et al.

(11) Patent Number: 5,175,758  
 (43) Date of Patent: Dec. 29, 1992

[54] CELLULAR TELEPHONE SYSTEM  
INTEGRATED WITH PAGING NETWORK

[75] Inventors: Lauri Levanto, Märynummi; Jukka T. Ranta, Salo, both of Finland

[73] Assignee: Nokia Mobile Phones Ltd., Salo, Finland

[21] Appl. No.: 579,814

[22] Filed: Sep. 4, 1990

## [30] Foreign Application Priority Data

Sep. 15, 1989 [FI] Finland 894371

[51] Int. Cl. 1 H04M 11/00

[52] U.S. Cl. 379/57; 379/59; 379/63

[38] Field of Search 379/57, 60, 61, 58, 379/63, 56, 59; 355/33, 36

## [56] References Cited

## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

0212761	3/1987	European Pat. Off.	379/61
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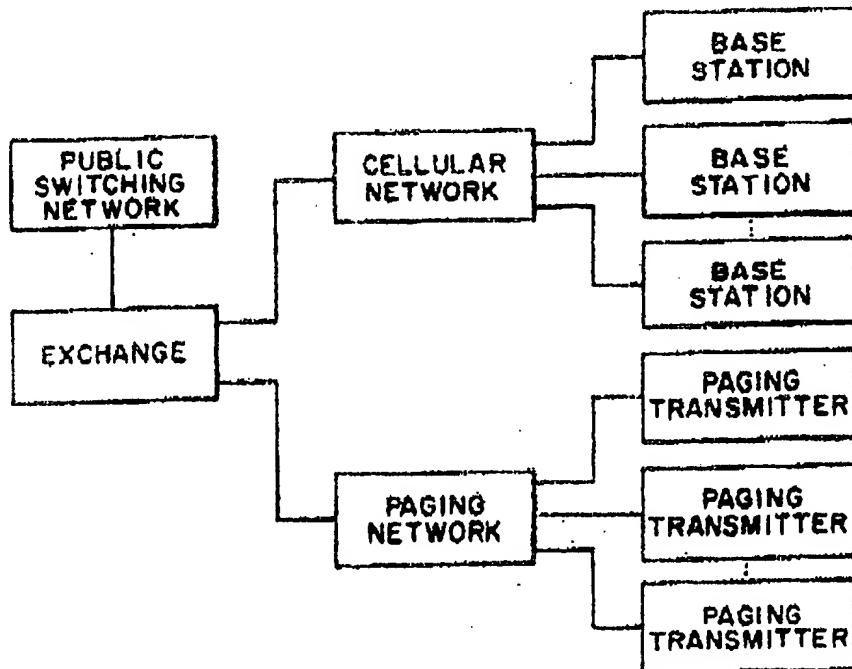
Article: Financial Times, "Designs on pocketing the cellular market", by Geoffrey Charlish, Dec. 11, 1987.

Primary Examiner—Curtis Kuntz  
Assistant Examiner—Dwayne D. Bost  
Attorney, Agent, or Firm—Darby & Darby

## [37] ABSTRACT

A telephone system with which a connection between two subscribers can be established, at least one of them being a mobile subscriber. The system includes a paging network composed of one or several extensive paging ranges, each of them having a paging transmitter (H1, H2) of its own, a small cellular network with an exchange and a plurality of base stations (T), and mobile telephones with which a pager has been integrated. When calling a mobile telephone, the transmitter of the paging range in which the telephone is known or assumed to be transmits a paging message to the telephone, whereby, when the telephone is in the neighborhood of the base station, the exchange of the cellular network establishes immediately a connection between the subscribers. No paging calls are lost because they are stored in the exchange of the cellular network, and on an appropriate occasion the pager of the telephone and the exchange compare the paging messages stored in the memories. The call can be transmitted from one base station to another during the call (handover).

19 Claims, 3 Drawing Sheets



5,175,758

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neighbourhood outside said paging range. The base stations are positioned in factories. The operational radius of a base station is about 200 m, corresponding to the power used in the cordless system. In the present instance, there may be about 30 simultaneous external calls and about 50 internal calls. An external call occupies one channel, an internal call two channels. Thus, 80 channels are needed within the system, 30 whereof being in the most loaded base station. The closed system only has one paging range, because of which only the requests to call which remain in the exchange are put through.

The telephones are personal hand telephones with which a call can be made in all factory buildings. When moving between the buildings and outside in the city, the telephone receives pings which can be discharged when back on the site.

Majority of the personnel live within the paging area so that call requests can be responded through a wire-connected network from home or the calls can be discharged when coming to the work place. If the telephone user lives outside the paging area, he has to read the arrived paging requests by registering the telephone.

An outgoing call can be made from one's own telephone on all sites.

The open system is characterized by an extremely extensive paging system, for instance national or multi-national. The size of the paging range is such that only a fraction of the users move from one paging range to another every day.

The system offers paging services, an immediate speech contact within the base stations, and an automatic response call service. The level of services may vary from range to range as the paging range is more covering than that of the speech traffic. As concerns subscriber classes, a less expensive paging service and a speech service may also be distinguished. The system may be so constructed that the apparatus of the present CT2 system are completely utilizable if the specification of the speech channel is adapted to be the same. The paging services and the handling of the arriving call necessitates a device conforming to the new system.

The system may also be implemented in the form of a special city network in the manner of the CT system, requiring a dense base station coverage, but also in the form of an extremely economic countryside network of low service level.

The city network of the open network is a small cellular network in which a home base station need not be defined. The paging range is uniform, whereby no registration is needed. The paging operation may be so constructed that very few shadows are established therein, and that the coverage of the base station services may be selected to conform to the demand. The base station network may be a small cellular network, whereby the power range of the mobiles is of the order of 100 mW, or a cellular micro network, whereby the power range is of the order of a few milliwatts.

If the receipt ranges of the base stations are overlapped, it is possible, without interrupting the call, to move from one receipt range of the base station to another, hand over, elsewhere the system only warns of the switching off of the call.

A delayed response call (paging memory) improves the level of services even in a defective base station network.

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In a city network, separate densely populated areas may be covered with the base stations within the range of a joint paging range.

The open system as a countryside network offers an economical alternative for implementing low service level. The entire area is typically covered with a paging network, the cities with a small or a micro cellular network, and in sparsely populated areas, the roads at intervals of e.g. 15 to 30 minute drives. The base stations are positioned in the marked parking sites because a mobile vehicle is able to travel over a receipt range during a call. The services of a countryside network consist primarily of requests to call and automatically reverse calls.

The open and the closed systems may also be combined. Private services employing a joint paging system may be included in an open system. Private base stations may be so defined in programs or using a private call channel that they show up in display only to the mobiles of the closed network. This kind of private service may be, for instance, an exchange of a company, whereby the enterprise buys a comprehensive paging service while attending itself to the telephone exchange within its own premises.

Operation through the open network may be allowed to the subscriber apparatus of the closed network outside the operating range of its own, but this may also be blocked.

The system and the procedure of the invention enables setting up a call between two mobile telephones so that an incoming call to a mobile telephone is possible and both mobile telephones can move from one receipt range of a base station to another during the establishing of the call, and during the call, so that the connection will not be switched off. Owing to the cellular system, one base station may serve several users. A significant characteristic feature is that even if the telephone were entirely switched off from use, or were located outside the paging range, the paging messages sent to it are stored in the exchange of the system, and no messages get lost.

It is obvious to a person skilled in the art to implement the system of the invention and the procedure for its use in a number of different ways, remaining, however, within the sphere of protection of the claims.

We claim:

1. A telephone system for establishing a connection between telephone devices of a first and a second user when a location of the telephone device of the second user is not known, comprising:

telephone devices of the first and second users, each of the telephone devices having a radio telephone with multiple channels and a pager for providing paging messages;

a paging network for transmitting paging messages between the telephone devices of said users, said paging network having at least two paging transmitters each establishing a respective paging range;

a cellular network for transmitting telephone calls between the telephone devices of said users, said cellular network having a plurality of base stations each with a receipt area for servicing the telephone devices located within range of the receipt area of said base stations, some of said base stations being located within at least one of said paging ranges; and

at least one exchange associated with each of said base stations, said exchange being operative for

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setting up calls within the cellular network and for storing in a first memory said transmitted paging messages. said exchange storing the transmitted paging message in a first memory in response to an inability of the telephone device of said second user to receive the transmitted paging message when sent by the pager of the telephone device of the first user and thereafter transferring the stored paging message to said telephone device of said second user at a time when said telephone device of said second user can receive said paging message. said exchange comprising means for initiating a call from said telephone device of said second user to said telephone device of said first user by using said stored paging message when said telephone device of said first user has been switched off before connection is established between the telephone device of the second user and the exchange.

2. The system in accordance with claim 1 wherein said telephone device for the one user is provided with a display, keyboard, second memory and control unit, jointly used by said pager and mobile telephone.

3. The system in accordance with claim 1 wherein said cellular network further comprises means for transferring said call from a first of said plurality of base station to a second of said plurality of base stations when said respective receipt range of said first and second base stations overlap and means for alerting said users when said call cannot be transferred between said first and second base stations.

4. The system in accordance with claim 1 wherein said cellular network further comprises means for updating said control of said exchange when the portable telephone moves between a first and second of said paging ranges so that transmitted paging messages are transmitted to said second paging range.

5. The system in accordance with claim 1 wherein the system is connected to a public switching network.

6. The system in accordance with claim 1 wherein said cellular network further comprising means for sending said stored paging message to set up the connection between said first and said second user, when the telephone device of said second user contacts said exchange of said respective one of said base stations.

7. The system in accordance with claim 6 wherein said contacting is performed when said second user is in said predetermined range of said respective base station.

8. The system in accordance with claim 1 wherein said base station includes a call channel and a speech channel.

9. The system in accordance with claim 8 wherein said exchange comprises means for transmitting a call set up message from said first user on said call channel to said base station of said second user, when said second user is outside the ranges of the base station of the first user.

10. The system in accordance with claim 1 further including means for informing said exchange when said cellular telephone moves between said paging ranges during said call.

11. The system in accordance with claim 1 further comprising means for storing messages in a second memory of said pager.

12. A method of operating a telephone system for establishing a connection between telephone devices of a first and a second user, comprising the steps of:

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initiating a call from the telephone device of a first user to a telephone device of a second user when a location of the telephone device of the second user is not known, the telephone devices each having a radio telephone and a pager for providing paging messages;

transmitting said paging messages between said users via a paging network, said paging network having a plurality of paging ranges;

accessing a selected cellular network via a selected one of a plurality of base stations, each of said base stations servicing the users located within a predetermined range of said base stations;

controlling the set up of said initiated call with at least one exchange associated with each of said plurality of base stations;

controlling said paging network by receiving said paging messages at said exchange;

storing said paging messages in said exchange in a first memory if the telephone device of said second user cannot receive said transmitted paging message;

transferring said stored paging message to said second user when said second user can receive such transferred paging message; and initiating a call by said exchange from said second user to said first user, by using said stored paging message, when said telephone device of said first user has been switched off before establishment of connection between said second user and said exchange.

13. The method in accordance with claim 12 further comprising the steps of:

transferring said call from a first of said plurality of base station to a second of said plurality of base stations when said respective predetermined range of said first and second base stations overlap.

alerting said users when said call cannot be transferred between said first and second base stations.

14. The method in accordance with claim 12 further comprising the step of updating said control of said exchange when the portable telephone moves between a first and second of said paging ranges so that transmitted paging messages are transmitted to said second paging range.

15. The method in accordance with claim 12 further comprising the step of transmitting said stored paging message to set up the connection between said first and said second user when said exchange is contacted by said second user through said respective one of said base stations.

16. The method in accordance with claim 15 wherein said exchange is contacted when said second user is in said predetermined range of said respective base station.

17. The method in accordance with claim 12 further comprising the step of transmitting a call set up message from said first user on a call channel to said base station of said second user, when said second user is outside the system.

18. The method in accordance with claim 12 further comprising the step of informing said exchange when said cellular telephone moves between said paging ranges during said call.

19. The method in accordance with claim 12 further comprising the step of storing paging messages in a second memory of said pager.



## United States Patent [19]

Atkins

[34] CELLULAR TELEPHONE

[75] Inventor: Warren Atkins, Anaheim, Calif.

[73] Assignee: Universal Cellular, Inc., Anaheim, Calif.

[43] Term: 14 Years

[21] Appl. No.: 492,110

[22] Filed: Mar. 12, 1990

[52] U.S. Cl. .... D14/138; D14/147

[38] Field of Search .... D14/138, 147, 148;

379/58, 59, 60

## [36] References Cited

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 D. 285,439 9/1986 Nogele ..... D14/138 X  
 D. 300,827 4/1989 Soren et al. ..... D14/148 X

[11] Patent Number: Des. 319,053

[45] Date of Patent: Aug. 13, 1991

D. 303,717 1/1990 Soren et al. ..... D14/138 X  
 D. 306,298 2/1990 Sawada ..... D14/148  
 D. 309,301 7/1990 Soren et al. ..... D14/148  
 D. 311,916 11/1990 Tomimatsu et al. ..... D14/148

Primary Examiner—Horace B. Fay, Jr.  
Attorney, Agent, or Firm—Timothy T. Tyson

[57]

## CLAIM

The ornamental design for a cellular telephone, as shown and described.

## DESCRIPTION

FIG. 1 is a top plan view of a cellular telephone showing my new design;

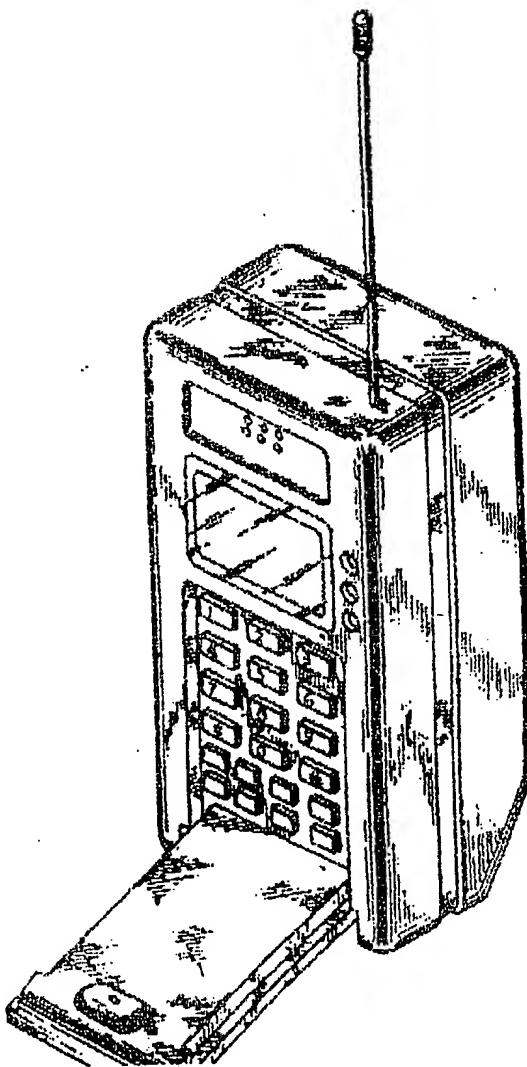
FIG. 2 is a rear elevational view thereof;

FIG. 3 is a front elevational view thereof;

FIG. 4 is a right side elevational view thereof, the left side elevational view being the mirror image thereof;

FIG. 5 is a bottom plan view thereof; and

FIG. 6 is a top, right, front perspective view thereof, with the door open and the antenna extended.



United States Patent [19]

Metroka et al.

US003117449A  
[11] Patent Number: 5,117,449  
[45] Date of Patent: May 26, 1992

(54) DUAL RECEIVER APPARATUS FOR  
INTEGRATED PAGING AND  
RADIOTELEPHONE FUNCTIONS

[75] Inventors: Michael P. Miroka, Algonquin; Stephen V. Cahill, Palatine, both of Ill.

[73] Assignee: Motorola, Inc., Schaumburg, Ill.

[21] Appl. No.: 681,658

(22) Filed: Apr. 8, 1993

**Related U.S. Application Data**

[63] Continuation of Ser. No. 431,518, Nov. 3, 1989, abandoned.

HO4M 11/00; G08B 5/22  
070 120-229/96

(51) Int. Cl. .... 379/58; 379/56;  
(52) U.S. Cl. .... 379/58; 379/63; 340/825.44

{58} Field of Search ..... 379/58; 360/823.44

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Examiner—Thomas W. Brown

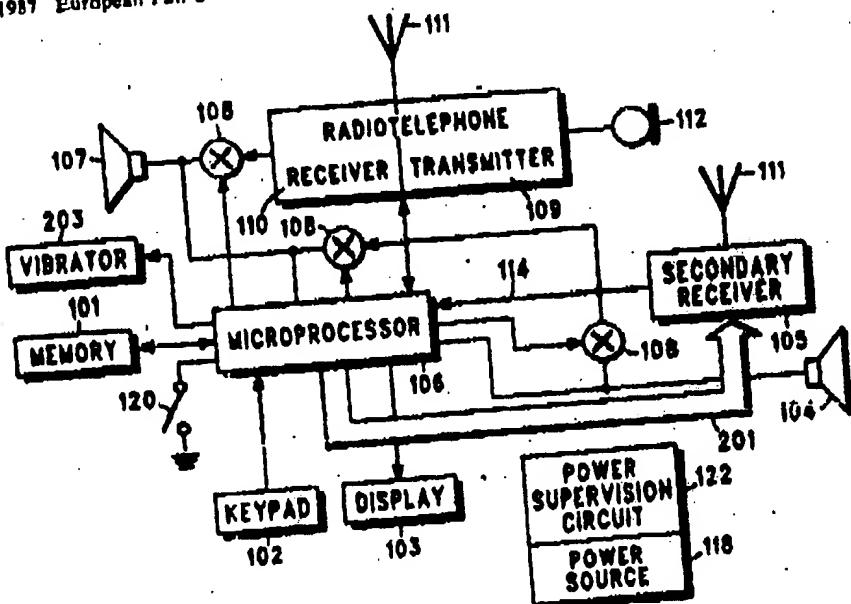
Primary Examiner—William Cummings  
Assistant Examiner—Kenneth W. Bolvin

Attorney, Agent, or Firm—Kenneth W. DUVALL

## ABSTRACT

(57) Both paging and cellular radiotelephone functions can be combined in a small, lightweight, single device by sharing most circuitry. The apparatus can receive paging signals simultaneously with radiotelephone signals because of dual receivers (105 and 110). When the paged party receives a page, an alert tone, a vibration, a visual indication, or a voice message is used to alert the party. Information extracted from the paging signal can be stored in memory (101) for later use. The paged party can select among messages stored in memory. If a message contains a telephone number, the paged party can call that number using the radiotelephone function at the touch of a button. The apparatus's keypad (102) can be used to program the paging function receiving frequency, identification code and type of paging system.

4 Claims, 8 Drawing Sheets



Don Hender



US005134717A

United States Patent [19]  
Sogaard Rasmussen

[11] Patent Number: 5,134,717  
[45] Date of Patent: Jul. 28, 1992

[54] RADIO TELEPHONE WITH REPERTORY  
DIALER

[75] Inventor: Poul E. Sogaard Rasmussen,  
Glostrup, Denmark

[73] Assignee: Motorola, Inc., Schaumburg, Ill.

[21] Appl. No.: 668,373

[22] Filed: Mar. 11, 1991

Related U.S. Application Data

[63] Continuation of Ser. No. 439,737, Nov. 21, 1989, abandoned.

[30] Foreign Application Priority Data

Nov. 26, 1988 [GB] United Kingdom ..... 8827670  
Nov. 26, 1988 [GB] United Kingdom ..... 8827733

[51] Int. Cl.: H04B 1/38; H04M 1/276

[52] U.S. Cl.: 455/89; 455/186.1;  
379/354

[58] Field of Search: 379/355, 357, 354, 216,  
379/144, 91; 455/89, 90, 185, 186, 344

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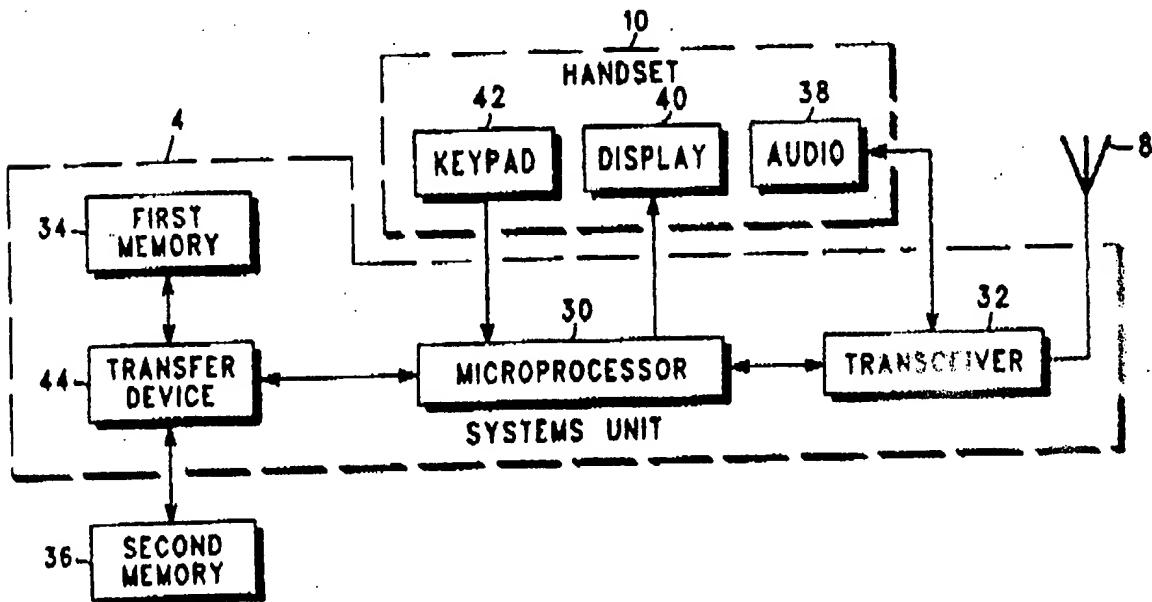
Primary Examiner—Reinhard J. Eisenzopf

Assistant Examiner—Lisa D. Charouel  
Attorney, Agent, or Firm—Kenneth W. Bolvin

[57] ABSTRACT

A radio (2) having: a first memory (34) for storing first information items; memory receiving slot (18) for temporarily receiving a second memory (20, 36) for storing second items of information; microprocessor (30) for accessing both said first and second memories; and user selective transfer device (42, 44) for causing an information item from one of the memories to be transferred to the other of the memories. In a preferred form the radio is a radiotelephone, the first and second items of information are telephone numbers and the second memory is a magnetic card or a smart card.

34 Claims, 2 Drawing Sheets



## **APPENDIX V**

## NON-DISCLOSURE AGREEMENT

This Agreement entered into this 22 day of JUNE 1993, by and between GlobalLink Communications, Inc., with a principal office in Irvine, California ("GlobalLink") and Unocal - Dan Webster located in 33300 Mission Blvd #731.

*Visa City CA 94587*

- A. Each party, as "Receiving Party", wishes to obtain from the other party as "Disclosing Party" certain information considered proprietary by Disclosing Party (the "Information").
- B. Disclosing Party is willing to make available the Information on a confidential basis upon receipt of certain assurances from Receiving Party.
- C. Receiving Party wishes to enter into this Agreement as an inducement for Disclosing Party to make available the Information.

NOW THEREFORE, in consideration of the mutual covenants hereinafter contained, Disclosing Party and Receiving Party agree as follows:

1. Receiving Party agrees to hold in confidence any and all Information that has been or will be disclosed, directly or indirectly, to Receiving Party except:
  - (a) Information which at the time of disclosure is in the public domain;
  - (b) Information which after disclosure is published or otherwise becomes a part of the public domain through no fault of Receiving Party (only after, and only to the extent that, it is published or otherwise becomes part of the public domain);
  - (c) Information which Receiving Party can show was in its possession (as evidenced by Receiving Party's written records) at the time of disclosure and was not acquired, directly or indirectly, from Disclosing Party or from a third party under a continuing obligation of confidence; and
  - (d) Information which Receiving Party can show was received by it (as evidenced by Receiving Party's written records) after the time of disclosure hereunder from a third party who did not acquire it, directly or indirectly, from a Disclosing Party under a continuing obligation of confidence.

For the purpose of this Paragraph 1, disclosures made to Receiving Party which are specific, (e.g., as to engineering and design practices and techniques, equipment, products, operating conditions, sales information, etc.) shall not be deemed to be within the foregoing exceptions merely because they are embraced by general disclosures in the public domain or in the possession of the Receiving Party. In addition, any combination of features shall not be deemed within the foregoing

exceptions merely because individual features are in the public domain or in the possession of Receiving Party, but only if the combination itself and its principal of operation are in the public domain or in the possession of Receiving Party.

2. Receiving Party agrees that it will not, without the written permission of Disclosing Party, use the information held in confidence by Receiving Party under Paragraph 1 hereof for any purpose other than as described in Recital "A" of this Agreement.
3. Receiving Party will disclose the Information provided hereunder solely to its employees necessary to carry out the purposes set forth in Recital "A", and who are familiar with the terms and conditions of this Agreement.
4. Upon completion of the purposes for which Information hereunder is provided, Receiving Party agrees to immediately return all documents and copies thereof, and notes made from the documents provided, to Disclosing Party.
5. Disclosing Party and Receiving Party agree that there is created herein a confidential relationship, and the covenants and agreements herein contained will be binding upon and inure to the benefit of their successors and/or assigns and their employees and agents.
6. Nothing contained in this Agreement or by operation of law shall be construed as:
  - (a) granting or conferring any rights, by license or otherwise, either expressly or by implication, estoppel or any other manner, to or for inventions or patent rights or copyrights by virtue of this Agreement; or
  - (b) granting or conferring any license or right with respect to any trademark, trade or brand name, the corporate name of either party hereto, or the corporate name of a subsidiary of either party hereto, or any other name or mark or any contraction, abbreviation or simulation thereof.
7. This Agreement shall expire three (3) years from the date of the last item of Information to be provided hereunder.
8. This Agreement shall be governed by the laws of the State of California.

GlobalLink Communications, Inc.

By: John E. Newbold  
Title: VP-SALES  
Date: 6/22/93  
Place: IRVINE, CA.

By: D. D. Oh  
Title: President  
Date: 6/22/93  
Place: IRVINE, CA.

## **APPENDIX W**

## Letter of Understanding - License Agreement

This agreement is by and between Kazuo Hashimoto of Hashimoto Corporation, a Japanese Corporation, doing business at 285 Sea Cliff, San Francisco, CA and Daniel Henderson / Innovad Company, doing business at 33300 Mission Blvd. Suite 131, Union City, CA 94587.

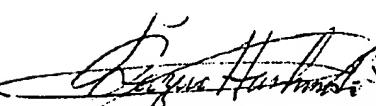
1. Hashimoto Corporation, or Kazuo Hashimoto, is the sole owner of all right, title, and interest to United States Patent Numbers 4,821,308 entitled Telephone Answering System with Paging Function and 4,882,744 entitled Automatic Paging System;
2. Hashimoto Corporation, or Kazuo Hashimoto, is the owner of one-half interest in, and has the right to convey exclusive rights to, United States Patent Number 4,065,642 entitled Message Signaling and Alerting System and Method Thereof issued to McClure;
3. Daniel Henderson and Kazuo Hashimoto have signed a mutual non-disclosure agreement on May 24, 1993 ( Exhibit "A") and have had discussions related to a new invention called a Radio Frequency Auto Dialer or Auto Dialling Pocket Bell Device, also known as "Intellect" or "Intellipager".
4. Kazuo Hashimoto / Hashimoto Corporation agrees to grant Daniel Henderson / Innovad or any related company, a transferable license right under the US Patents 4,065,642, 4,882,744, and 4,821,308 to make, use, and sell pager or pocket bell devices throughout the United States for an initial term of one year from the date of execution of this agreement. This agreement will be renewable at the end of each one year period upon mutual agreement between Kazuo Hashimoto or Hashimoto Corporation and Daniel Henderson or Innovad or any related company.

The first six months of the license grant will be on an exclusive basis for all Pocket Bell or Pager devices. At the end of the initial six months, Kazuo Hashimoto agrees to extend the exclusivity for additional periods based upon satisfactory performance by Daniel Henderson, Innovad or any related company.

Further, Daniel Henderson agrees to submit to Kazuo Hashimoto a report of progress on the development of a prototype unit upon request. Daniel Henderson also agrees to show Kazuo Hashimoto the completed prototype pager / pocket bell dialer as soon as it is completed and prior to disclosure to other parties.

5. In consideration for this license agreement, Daniel Henderson / Innovad or any related company agree to pay to Kazuo Hashimoto, or Hashimoto Corporation, or his foundation royalty payments of 1% ( one percent ) of all U.S. pager or pocket bell gross sales revenues (X factory). Payment will be made within 60 days after the end of each six month period so long as this license agreement is in effect.

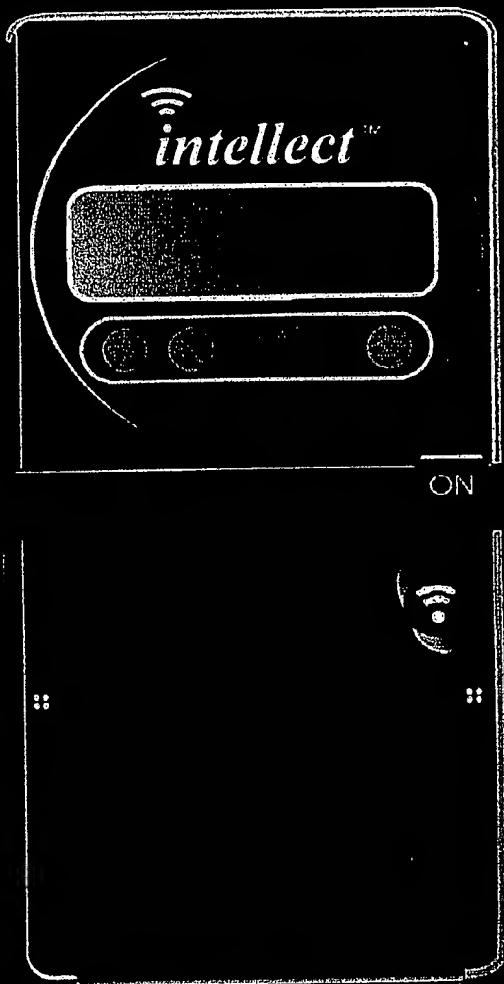
6. This Agreement constitutes the entire agreement and understanding between Kazuo Hashimoto and Daniel Henderson. No modification shall be valid unless in writing and signed by both parties. This agreement does not create an agency, Joint Venture, or Partnership between Kazuo Hashimoto and Daniel Henderson. Witnessed this day,

 Kazuo Hashimoto	Title	06/24/93	 Daniel Henderson	Title	06/17/93
---	-------	----------	---	-------	----------

  
Witness:   
Daniel Henderson

## **APPENDIX X**

# intellect Corporation



U.S. Pat. 4,490,579   4,821,308   4,065,642  
4,882,744   4,961,216   4,882,750  
4,924,496

Other Patents Pending

# intellect

# features

## CARD/ANS.



- Eight memory locations

## DIAL



- Dials highlighted field in File display or Page display modes.
- Allows dial mode from keypad.
- Dials "local" by suppressing area code
- Dials "slow" for difficult line conditions.

## CALC



- Standard four function arithmetic

## FILE



- Personal file
- Business file

## TO-DO



- Date / Time search able
- Alarm codes can be appended to file

## TIME



- Local time
- World time
- Daily alarm - on/off
- Set / change local time

## PAGE



- Time / date stamp
- Auto file match with PC download data
- Fax, phone, E-mail signals
- stored in buffer memory for later retrieval

## CURSOR MOVEMENT



- Hold down for rapid cursor movement
- Used with Search mode

## CALENDAR



- Hot link to TO-DO activities
- Context sensitive

## SEARCH



- Used in conjunction with FILE, TO-DO, TIME, PAGE, and CALENDAR mode keys.

## SECRET



- Mark records to restrict access.
- Enter number, enable / disable.

## RECORD



- Allows voice notations for items such as customer requests for information, reminders, and other important information.
- Digital memory stores up to 2 minutes - no moving parts.
- Also provides for a voice response to incoming Fax, Page, E-Mail, etc..

## COMPUTER



- Provides menu driven instructions for computer link to download data or upload data from MAC/PC.

## **APPENDIX Y**

# Innovad

Innovative Development & Manufacturing

FACSIMILE to 415-813-3097  
Phone 415-857-2805 Scty. Carol Frisini  
August 06, 1993

Hewlett Packard Corporation  
Attn: Mr. Ron Griffin

Dear Mr. Griffin:

As we discussed, I am involved in a new product development effort which is related to a portable hand-held device.

I currently own or hold exclusive license rights to the following US patents:

4,085,642 Message Signaling and Alerting System and Method  
4,821,308 Telephone Answering System With Paging Function  
4,882,744 Automatic Paging System  
4,490,679 Auto Dialing Paging Receiver  
4,882,750 Programmable Dialer System

McClure  
Hashimoto  
Hashimoto  
Godoshian  
Henderson

I am also concluding negotiations on several other patents related to our current project.

There are three technologies that we are interested in which are held by Hewlett Packard.

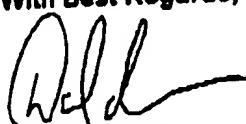
First, an article in the latest issue of *Microtimes* (July 26, 1993) describes the Serial Infrared Link (SIR) and PCMCIA technologies which are available for license. We would like to embody these technologies in our planned device. No patent numbers were cited in the news article/interview.

Secondly, we would like to discuss possible licensing of US 5,043,721 issued to May (Corvallis, OR) entitled *Paging Accessory for portable information/computing devices*.

I would like your assistance in directing my inquiry to the decision maker(s) at Hewlett Packard who would be prepared to discuss possible licensing, cross licensing or some joint venture regarding these technologies that may prove to be mutually beneficial.

Thank you very much for your assistance in directing my inquiry.

With Best Regards,



Dan Henderson

(510) 487-6702

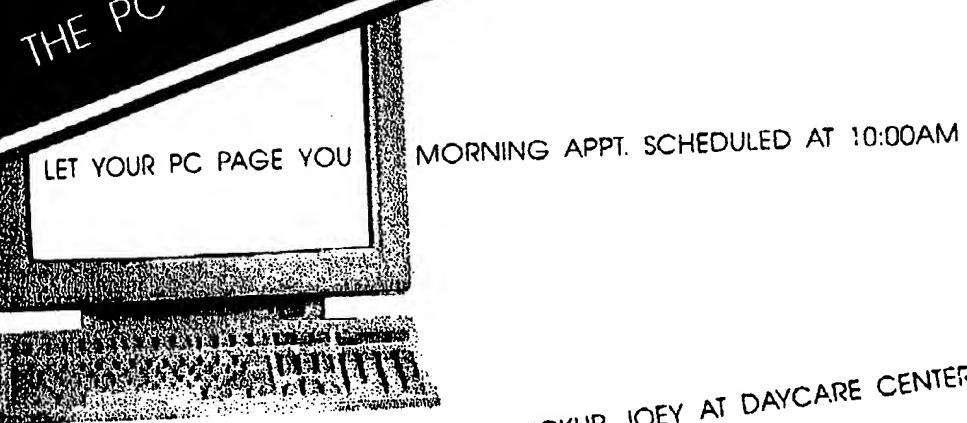
Response: - May Patent will be avail. for license, a lot of interest from many Cos.. - Will call when they determine licensing policy.  
Also, SIR technology \$5000 flat fee.

## **APPENDIX Z**



# ALPHAPAGE®

THE PC TO PAGER MESSAGING SOFTWARE



MORNING APPT. SCHEDULED AT 10:00AM

JOHN REPORTS SYSTEM RUNNING FINE... PICKUP JOEY AT DAYCARE CENTER

TAKE FLIGHT 101 TO

LET YOUR PC PAGE YOU

InfoRad

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located around the world!

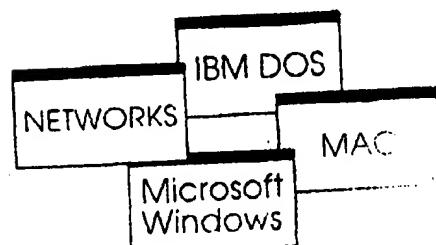
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## **APPENDIX AA**

# Library of Ideas

Patent records there date back to days of George Washington

By DALE F. MEAD

The garage-based business symbolizes the entrepreneurial spirit of Silicon Valley, but the patent library closer to reality. Many more enterprisers have started with someone poring through patents than have started in the other side of a garage door from a sun-bleached car.

And no inventor in the Bay Area is a patent library closer than the Sunnyvale entrepreneur.

In fact, Sunnyvale's Patent Information Clearing House, as it's formally called, is the only one this side of Sacramento, and people sometimes drive here from the Capitol, those library does not have copies of every patent issued by the U.S. Patent Office. The Sunnyvale facility does—and the latest trademarks, too.

Sacramento? That's nothing, low about the Rocky Mountains?

"We get professionals, larger corporations and small entrepreneurs," supervising librarian George Glushenok explains. "We've had people from Redding, San Luis Obispo and Ukiah. Patent attorneys come here. I had one from Boulder, Colorado. I mentioned to him that Denver had a patent library. He said it wasn't as complete as ours."

Tucked away in a residential area, the library stands in rectangular Building 7 of the Raynor Activity Center, south of Dunford Way between Partridge and Quail avenues. It doesn't even have a name on it, only lettering on the door that reads "LIBRARY" (OURS Monday to Friday 9 a.m. to 5 p.m.; Sat 12 p.m. to 5 p.m.). A single hanging from the canopy inside is labeled, "Entrance."

The four-room, single-story structure contains copies of 1.5 million patents on paper as well as microfilm copies of patents all the way back to Patent No. 1, signed by George Washington in 1790, for an approved method of making glass. Patents from No. 4,937,368 to last month's issues can be located easily on two computers with computer disks (CD-ROM) that are updated weekly. Demand for the computers necessitates reservations and a time limit of 15 minutes when others are waiting, they usually are.

"We were lucky to get three people a day when we got this thing started up," said recently retired attorney Jack L. Bohan of Los Altos, who launched the library in 1962 at age 29. "I went in there a week ago," says Bohan, now 61, "I was amazed. There were 30 people."

Orchard-laden Santa Clara Valley used to tout itself as the "Valley of the Heart's Delight." But Bohan took one look at the burgeoning high-tech institutions—Westinghouse, General Electric, IBM, the Ames Research Center and Stanford University's high-impact engineering programs—and knew what they would need.

"It seemed to be a good idea to have these patents for the people in these professions to look at," he recalls. "The three millionth patent was scheduled to be issued in September 1961. I thought that would be a good point for a library to start."

The challenge wasn't money—a subscription for copies of all patents issued cost \$50 per year—but finding a library that could handle the foot-tall stacks of paper published every week.

"I checked several other libraries," Bohan says. "San Jose had no room for their existing facilities; San Francisco likewise. Sunnyvale wasn't loaded with space, but they were intrigued with the idea. After six months, the City Council agreed to spring for the \$50." Patent files started arriving at City Hall in January 1962. Two years later, "one wall of my garage was stacked up with these things," he says.

When organizers found a temporary facility on Arques Avenue across from the current Bank of America branch, Sunnyvale's Boy Scout troop helped organize the files over two weekends so that they would be easier to search.

The response inspired the city to provide a permanent home in an abandoned firehouse on Fair Oaks Avenue in 1965. The patent library became part of the city's main library in March 1971, four months before the firehouse burned down. Nearly 10 years later, the patent library moved to its current location.

The Patent Information Clearing House also subscribes to government records for trademark search-



Librarian Dottie Thompson advises Larry McQuillan on his research.

es. A few years ago, the personnel conducted searches for a modest fee, but according to Glushenok, they now provide assistance because the computer system makes the task much simpler.

The library often serves clients it never sees. "Many companies set up accounts with us," Glushenok explains. "We charge fees and send copies to their offices."

Large corporations don't have to use the library for their searches. They can subscribe to on-line services more sophisticated than the facility can offer. But those services charge a hefty sum to print out files on-line. Many companies order copies from the clearing house instead. Even at \$3.55 per patent and 90 cents a page, plus any special charges, the client comes out ahead.

"We had one company ask for 50 patents," librarian Dottie Hamilton says. "We sent them the next day, and the company got them the following day by noon. Sometimes a

company will need a patent by two-hour fax because they're going to court." The staff makes sure that the clients get it.

That level of service has made the library a moneymaker for the city. Last year, it brought in revenues of \$280,000 with expenditures of \$237,000, putting \$43,000 in Sunnyvale's General Fund.

In addition to offering efficiency and fiscal self-sufficiency, the patent library also exudes a spare intellectual charm borne of equality and mystery. The shelf-lined rooms lure a steady stream of strangers, each playing a private game of chess that can take minutes to lose or years to win. The person that one passes in the stacks or that waits for a turn to use the computer could be a barebrained Walter Mitty with a vague idea, an unsung genius living off inventor's royalties or anything in between. You can't tell by looking. All visitors have in common is a secret and a

goal to test the originality of that secret.

Dan Henderson of Union City, an ex-IBM employee, already has one product out through his company—Innovad: Kid-Alert, a credit-card-sized, preprogrammed telephone dialer for a key chain or wallet. Put it to a phone receiver and press the button, and it phones home. Henderson, inspired by renowned Japanese inventor Kazuo Hashimoto, who devised the first telephone answering machine in 1958, is now researching several other ideas.

"This is a great asset to have here," says Henderson, who uses the library frequently.

First-timer Larry McQuillan of Sunnyvale echoes the same sentiment. "We're pretty lucky to have this so close by," he says.

An economist, McQuillan wants to verify that the trademark for his pending newsletter isn't already taken. "I'm trying to figure all this out," he comments. "I'll know in a half-hour; that's when I get on the computer."

Joanna Schirle of Morgan Hill also spends her time perusing the trademark files, clearing a fictitious name for her small business, through which she intends to market a product to help students study for their Graduate Record Examinations.

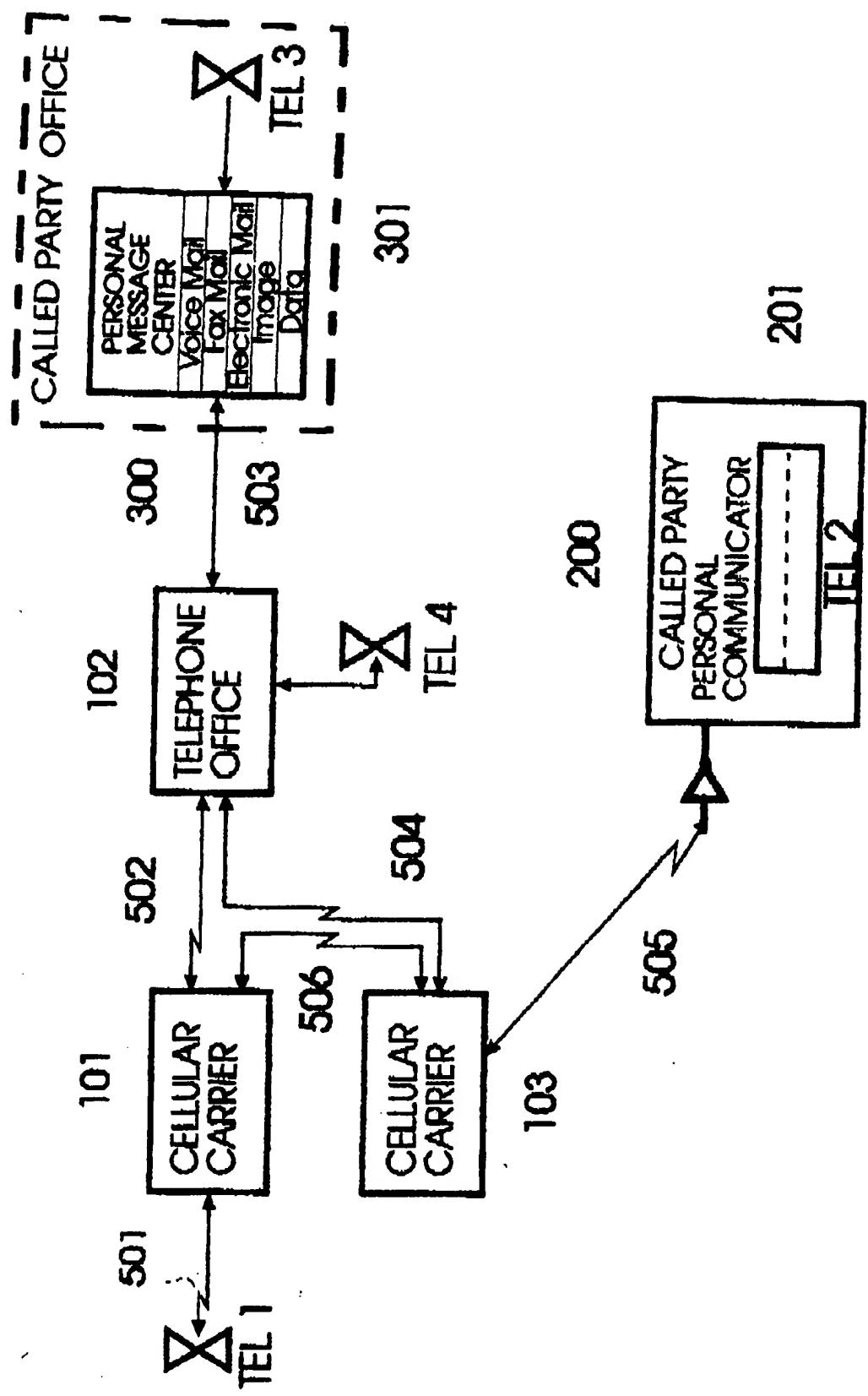
She's found another pay-off for her research. "I'm writing down names of companies that I might market my product to. If I decide to sell [the rights to] it in a couple years, there are all sorts of companies [with similar products] that might want to make it part of their product line," Schirle says.

Another frequent user, Fred O'Leary of Cupertino, sees the facility as a historical gold mine for his hobby, collecting corkscrews. Initially, he wanted to track down the patents for those in his collection; now he intends to track down every corkscrew ever patented. Corkscrews had many other uses besides opening wine bottles at the turn of the century.

"I suspect there are a thousand corkscrew patents," says O'Leary, who spends 1-6 hours a day at the library, going for the magic number. "I'm in the high nine hundreds now. I just go through the books."

## **APPENDIX BB**

**FIG. 4**



file created 8/30/93

## **APPENDIX CC**

# Innovad

Innovative Development & Manufacturing

September 22, 1993

**Ms. Yoshimi Tomizawa-Shu**  
NEC America Inc.  
8 Old Sod Farm Road  
Melville, New York 11747

**Re: Letter dated April 23, 1993 and our desire to pursue business opportunities with NEC.**

Dear Ms. Tomizawa-Shu:

Per our telephone conversation yesterday, enclosed please find a mutual non-disclosure agreement for your review. In order for our foreign patent rights to be preserved related to our pending US applications it is necessary to execute a non-disclosure similar to the attached agreement. Please make suggestions as to any language that you find difficult to agree to and I will be happy to discuss.

I am interested in pursuing business opportunities with NEC which may include licensing, manufacturing, a joint venture or some other strategic partnering arrangement. I would like to meet with key decision makers at your company to explore mutually beneficial opportunities related to our current patent base and planned new products and pending patent applications.

As we discussed, I am travelling to Japan in mid October to present new product ideas and pursue business opportunities with several major Japanese companies.

Please call me at your convenience so that we may discuss how to meet our mutual objectives and proceed.

With Best Regards,



Dan Henderson  
Innovad

**Attachment**

# **Innovad / NEC**

## **MUTUAL NON-DISCLOSURE AGREEMENT**

**THIS AGREEMENT**, made (DATE), by and between Dan Henderson dba Innovad (hereinafter called "Innovad"), having an office at 33300 Mission Blvd. Ste. 131, Union City, CA 94587, and NEC America Inc., having an office at 8 Old Sod Farm Road, Melville New York 11747-3112 (hereinafter called "NEC");

Innovad owns exclusive rights or owns US Patents 4,065,642, 4,821,308, 4,490,579, 4,882,744 and 4,882,750 which pertain to pager receiver devices, hereafter referred to as "PATENTED INFORMATION";

Innovad has developed certain new technologies and methods embodied in three new patent applications entitled:

- Personal communicator device with improved message notification, caller identification and caller location methods;
- Improved message notification system and method; and
- Improved personal messaging system.

Innovad also has developed a prototype of a new pager receiver device which demonstrates the new technologies and methods, hereinafter referred to as "CONFIDENTIAL INFORMATION";

NEC is a developer and owner of certain technologies relating to the consumer electronics industry. NEC possesses certain confidential and proprietary information and know how in consumer electronic equipment hardware and software and the marketing thereof, hereinafter referred to as "CONFIDENTIAL INFORMATION";

The parties desire to investigate a possible business relationship in regards to research, development, and commercial exploitation of the Confidential and Patented Information.

Innovad and NEC wish to ensure that all confidential information remain confidential and be used only in the evaluation of a possible business relationship between the parties.

In consideration of the mutual promises and covenants herein contained, the parties agree as follows:

1. Each party agrees that it will not disclose any confidential information of the other, and such information shall not be disclosed in whole or in part to others, or reproduced or copied in whole or in part for any purpose, without the express written consent of the disclosing party. If such information is in tangible form, it shall be returned to the disclosing party upon request.

Each party shall not without first obtaining the written consent of the other, disclose to any person, firm or enterprise, or use for its benefit, any information relating to the pricing, methods, process, financial data, lists, apparatus, statistics, programs research, development or related information of the other party, concerning past, present or future business activities of the other party.

2. Information shall not be deemed "confidential" for purposes of this agreement to the extent that such information, (1) was acquired by a party hereto before the contemplated discussions and when such party was under no obligation to keep such information confidential, (2) is or becomes publicly known through no wrongful act of a party hereto, (3) is rightfully obtained by the receiving party from any third party who is legally entitled to possession of such information without similar restriction and without breach of any obligation owed to the disclosing party, (4) is disclosed pursuant to a lawful requirement or request of a government agency; or (5) is approved for release by written authorization of the owning party.

3. Each party further acknowledges and agrees that, in the event of a threatened breach or active breach by it of the provisions of the Agreement, the other party will have no adequate remedy for damages, and, accordingly, shall be entitled to an injunction against such threatened breach. However, no provision in this Agreement shall be construed as a waiver or prohibition of any other legal or equitable remedy for threatened or active breach hereof.

4. Nothing contained in this Agreement shall be construed as granting or conferring upon a party hereto any proprietary right, by license or otherwise, in any confidential or patented information disclosed by the other party.

For INNOVAD:

By: Dan Henderson

Title: \_\_\_\_\_

Date: \_\_\_\_\_

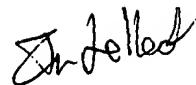
For NEC America Inc.

By:

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## **APPENDIX DD**



# Innovad

Innovative Development & Manufacturing

October 1, 1993

Mr. Sho Saito  
Shinwa Communications of America Inc.  
P.O. Box 26407  
Oklahoma City, OK 73126

**SUBJECT: Confidential Meeting at Shinwa Communications Today with Casio**

Dear Mr. Saito:

Thank you for taking an interest in me and my new invention related to intelligent numeric paging devices and systems. I am greatly honored that you have offered to help make introductions for me to NEC during my visit to Japan this month.

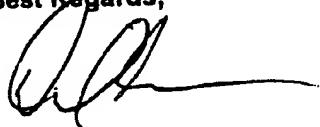
I am prepared to discuss possible license agreements, some joint venture or strategic partnering arrangements if it makes sense for interested companies such as NEC and Casio. My vision is to change the way in which pagers are used in the future and improve the information that is available to the end-user. These relationships and the technology I have developed will only be a starting point for many new ideas planned for that future.

After you have had a chance to discuss this matter internally there I would welcome the opportunity to meet with you again.

Thank you again for your interest in my project and for your comments related to my new invention. Please thank Mr. Summerlin for his hospitality during my visit there.

I look forward to a developing a mutually rewarding relationship with you and your company and will work hard to earn the trust you have placed in me.

With Best Regards,



Dan Henderson

Attachment - letter to Kazuo Hashimoto

Thank you for all your help.

**NEC**

**KOJI YAMASAKI**  
MANAGER, ENGINEERING  
3RD PRODUCT  
DEVELOPMENT DEPARTMENT  
MOBILE COMMUNICATIONS DIVISION

NEC Corporation  
4035, IKEBE-CHO, MIDORI-KU  
YOKOHAMA, 226 JAPAN  
TEL (045) 939-2314  
NEFAX (045) 939-2363

**NEC**

**NOBORU SAKATA**  
ASSISTANT MANAGER  
DEVELOPMENT PROMOTION OFFICE  
MOBILE COMMUNICATIONS DIVISION

NEC Corporation  
4035, IKEBE-CHO, MIDORI-KU  
YOKOHAMA, 226 JAPAN  
TEL (045) 939-2361  
FAX (045) 939-2329

**NEC**

**HIDEYUKI TSUNODA**  
SENIOR MANAGER  
MOBILE COMMUNICATIONS  
ENGINEERING DEPARTMENT

NEC Shizuoka, Ltd  
4-2 SHIMOMATA  
KAKEGAWA, SHIZUOKA 438 JAPAN  
TEL (0537) 22-8237  
FAX (0537) 22-8239

日本社会部

本日 MR Henderson が 連絡下さい。  
上記 持山 晴穂 は Contact  
(2月3日 2月7日) です。

## **APPENDIX EE**



**MITSUI COMTEK CORP.**  
200 PARK AVENUE, SUITE 4114-11  
NEW YORK, N.Y. 10168  
TEL (212) 878-0814  
FAX (212) 878-4037

via (510) 487-6762

October 8, 1993

Mr. Dan Henderson  
Innovad  
33300 Mission Blvd., Suite 131  
Union City, CA 94587

Dear Mr Henderson,

Thank you for your letter dated October 1, 1993 and phone call on the day before yesterday.

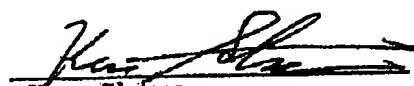
As I informed you I would most probably visit Japan week of October 18, 1993. If your appointment with Casio through Mr. Hashimoto meets this schedule, I would be happy to join such meeting.

Casio and Mitsui has been jointly developing the product with very similar concept to yours. Caller ID was one of the idea we have been working. If your idea and technology is different from Casio's one, we would be very much interested in reviewing further details. In this sense definition and technological explanation of "Caller ID" is very important thing for us to start with.

I would contact Casio to know their position for your proposal and advise you any outcome.

Looking forward to seeing you again very soon.

sincerely yours,

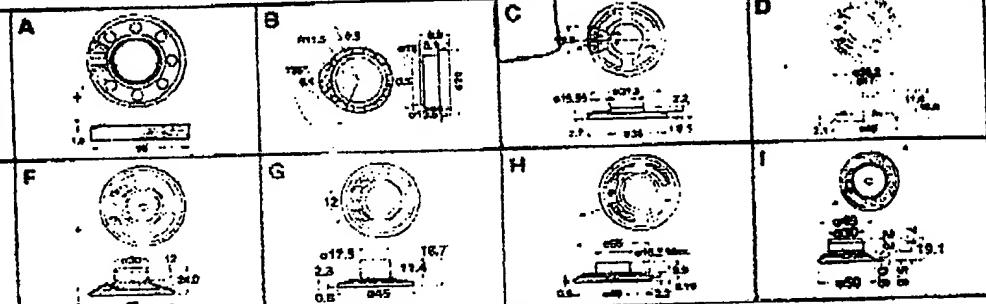
  
\_\_\_\_\_  
Ken Shima  
Mitsui Comtek Corp

cc: M. Hatama  
Manager of Mobile Telecommunication Dept.  
Telecommunication Business & Project Div.  
Mitsui & Co., Ltd.

## **APPENDIX FF**

## Panasonic. Micro Speakers

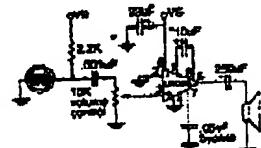
These compact, low-profile micro-speakers are best suited for portable audio equipment such as portable radios, microcassette recorders and liquid crystal TV sets, and compact speech amplifying equipment such as audio-response electronic intercoms, audio-response clocks, audio-response cameras and various alarms.



Ref.	Outer Dia. mm	Input (W) Max.	Impedance Ω	Frequency Range (Hz)	Sound Press. Level dB(PW 0.05)	Magnet Size (mm)	Weight (g)	Capacitance Part No.	Price/ 10	Stock	Manufacturer's Part Number
A	20	0.15	8	400-3000	71	10 X 5.7 X 0.8	0.4	PSS01-H07	79.00	79.00	EAS-SP1-005
B	20	0.15	8	400-3000	72	12 X 5.7	2.5	PSS02-H07	22.20	22.20	EAS-SP1-006
C	20	0.15	8	400-3000	77	12 X 5.7	1.4	PSS03-H07	51.00	51.00	EAS-SP1-004
D	20	0.15	8	400-3000	74	12 X 5.5	1.5	PSS04-H07	45.00	45.00	EAS-SP1-003
E	20	0.15	8	400-3000	75	12 X 5.7	1.5	PSS05-H07	45.00	45.00	EAS-SP1-002
F	20	0.15	8	400-3000	76	12 X 5.7	1.5	PSS06-H07	22.20	22.20	EAS-SP1-001
G	20	0.15	8	400-3000	78	12 X 5.7	1.5	PSS07-H07	22.20	22.20	EAS-SP1-002
H	20	0.15	8	400-3000	79	12 X 5.7	1.5	PSS08-H07	22.20	22.20	EAS-SP1-003
I	20	0.15	8	400-3000	80	12 X 5.7	1.5	PSS09-H07	22.20	22.20	EAS-SP1-004
20	0.15	8	400-3000	81	12 X 5.7	1.5	PSS10-H07	22.20	22.20	EAS-SP1-005	

## Panasonic. Electret Condenser Microphone Cartridge

• Consists of a high voltage internal discrete microphone, circuit elements and a Field Effect Transistor (FET) designed to feed voltage bias from the capsule to the circuit board. • Electret microphone, highly efficient direct coupling. • High voltage operating principle, low impedance (2.2KΩ) and high output level directly, and a high degree of sensitivity under severe shock, vibration and temperature tests. • Applications: telephone, microphone, vibration, pressure, temperature, humidity, sound, sonic control, heat and sensors, and others. All outputs and microphones are non-polarized.



Ref.	Sensitivity (dB SPL, 1KHz)	Frequency Range	Operating Voltage Max./Min.	Circuit Configuration	Sensitivity Response	Imp.	Physical Size (mm)	Price/ 10	Stock	OE&P Part No.	OE&P Price
A	PSS05-H07	20-16,000±2	10Vdc±5V	0.6mA	within-3dB 0-3V	>30dB	0.97 X 0.7	1.11	5.52	79.00	79.00
B	PSS01-H07	20-15,000±2	10Vdc±3V	0.6mA	within-3dB 0-3V	>30dB	0.97 X 0.7	1.26	10.92	50.00	50.00
C	PSS02-H07	20-12,000±2	10Vdc±2V	0.6mA	within-3dB 0-3V	>30dB	0.97 X 0.5	0.99	5.72	47.00	47.00
D	PSS03-H07	20-16,000±2	10Vdc±5V	0.6mA	within-3dB 0-3V	>30dB	0.97 X 0.7	1.10	12.20	150.50	150.50
E	PSS04-H07	20-15,000±2	10Vdc±5V	0.6mA	within-3dB 0-3V	>30dB	0.97 X 0.7	1.23	11.88	100.00	100.00

• Unidirectional. • U-directional. • 100% linear bias

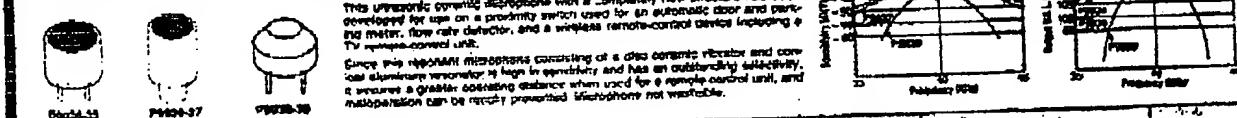
## Panasonic. Ceramic Microphone/Receiver Cartridge

• Advantages of the cartridge include: compact size, a frequency response that is suitable for telephone and wireless equipment, very low power consumption, no magnetic field, and a high degree of reliability with adverse conditions of temperature variations and shocks. • Frequency Response: • Output S.P.L. 107dB (0dB 1V/1000Hz, 1KHz) • Frequency Range: 10-100,000 Hz • Microphone Characteristics: • Sensitivity: 73dB (0dB 1V/1000Hz, 1KHz) • Impedance: 1.0KΩ (1KHz) • Capacitance: 90pF (1KHz) • Frequency Range: 80-1,000 Hz

## Panasonic. Ultrasonic Ceramic Microphone

This ultrasonic ceramic microphone using a completely new structure has been developed for use on a proximity switch used for an automatic door and parking meter, flow rate detector, and a wireless remote-control device including a TV remote control unit.

Since this ultrasonic microphone consisting of a disc ceramic vibrator and wave converter resonator is high in sensitivity and has an outstanding selectivity, it ensures a greater operating distance when used for a remote control unit, and this operation can be directly controlled microphone not susceptible.



PSS04-H07 PSS05-H07 PSS06-H07

Ref.	Or. Freq. 54.0 MHz										
PSS04-H07	41.0	—	4.0	110	20	10.0	10.0	5.62	27.00	371.00	PSS04-H07
PSS05-H07	40.0	—	4.0	—	—	10.0	10.0	5.61	47.40	311.20	PSS05-H07
PSS06-H07	41.0	—	4.0	105	20	10.0	10.0	5.60	44.20	274.70	PSS06-H07
PSS07-H07	40.0	—	4.0	—	—	10.0	10.0	5.59	44.20	274.70	PSS07-H07
PSS08-H07	39.8	—	2.0	105	20	12.5	7.5	23.73	241.00	2160.00	PSS08-H07
PSS09-H07	39.5	—	2.0	105	20	12.5	7.6	23.73	241.00	2160.00	PSS09-H07

1-800-344-4539

Easy To Remember: 1-800-DIGI-KEY

## **APPENDIX GG**

# Innovad

Innovative Development & Manufacturing

11/3/93

Mr. Sho Saito  
President  
Shinwa Communications of America Inc.  
3501 Melcat Drive Suite E  
Oklahoma City, OK 73179

Dear Mr. Saito:

Thank you for meeting with me last week to discuss my new ideas regarding an improved numeric paging receiver accessory and an improved programming system for paging receivers.

I am very interested in working with you on the programming project that you mentioned and have several good candidates in mind that could be helpful in meeting your needs. I look forward to learning more about your requirements when you are ready.

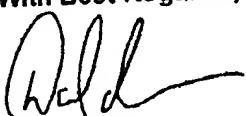
Attached is the information we discussed for Mr. Summerlin and Mr. Hiraiwa to present upon their visit to Japan next week. I believe there are several ideas that could mean new products and new markets for Shinwa Communications. I will call them today and see if there is any further information they will require.

Today Mr. Hashimoto asked me to manage his patent portfolio for Hashimoto Corporation, which includes over 1000 patents world wide. This will be in addition to my current venture with him but will not exclude any future business arrangements between Innovad and Shinwa.

I am sending a few patents which I believe will be of mutual benefit for discussion that may apply to your products. I would like to explore which patents will be most valuable to you and arrive at a reasonable royalty arrangement where appropriate.

I look forward to building a long and successful relationship with you and your company. Thank you for taking an interest in me and my ideas - I am committed to help ensure your success there at Shinwa.

With Best Regards,



Dan Henderson

## **APPENDIX HH**

HENDERSON BUDGET ANALYSIS - PATENT LICENSING PROGRAM

NOTE: ALL RECEIPTS FOR EXPENSES WILL BE SENT WITH A COPY OF THIS REPORT  
TO HASHIMOTO CORPORATION - ATTN: Mr. Eric Homming

EXPENSE

ITEM

Nov.-Dec.

TRAVEL

AIRFARE

728 include Dallas, Oklahoma City - Shinwa Communications

LODGING

326.4 for Las Vegas CF show

CAR RENTAL/TRANSP.

160 for Dallas 12/19 trip re Samsung

0

DEALS / MISC.

LEGAL

ATTORNEY FEES

510 File Wrappers for US 4,874,263, 5077788, 4584434 ..

FORMAL SEARCHES

0

FORMAL DRAWINGS

0

FILING FEES

0

CONTRACT ADMIN.

0

COMMUNICATION

TELEPHONE / FAX

768.47 October, November, December

POSTAGE

73 fax to attorneys for Samsung, other matters

PRINTING

269.14 computer time rental for patent drawings, copies, etc.

Misc

1066.55 intellect brochures, printing/design

TOTAL

42,826

42,826

## **APPENDIX II**

DEC-09 10:49 INNOVAD COMPANY

15104872280

P01

# Innovad

Innovative Development &amp; Manufacturing

## CONFIDENTIAL DISCLOSURE AGREEMENT

This Agreement is between

*Morris Reese*

(hereinafter called "Recipient")

and Daniel Henderson, President of Innovad (hereinafter called "Owner").

The Owner possesses certain confidential information concerning a

*Call tracking system*

as depicted and described in the Attachments listed hereunder

which the Owner will disclose in confidence to the Recipient.

In consideration of said disclosure, Recipient agrees to treat the information disclosed as confidential, and will use the same efforts as are regularly employed by it with respect to its own confidential information to avoid disclosure to others.

The recipient will not divulge or use in any manner any of the confidential information that it receives from the Owner, unless by written consent from the Owner. Provided, of course, that this obligation to treat information confidentially will not apply to any information already in Recipient's possession and disclosed as such, to Owner, prior to signing this agreement.

The Recipient will return all information and copies to the Owner if requested to do so by Owner or his appointed agent.

The laws of the STATE OF TEXAS shall govern the interpretation and enforcement of this Agreement, in particular, the trade secret laws of the STATE OF TEXAS shall apply.

Venue for suit on the construction or enforcement of this Agreement shall be Tarrant County, Texas.

RECIPIENT

By:

Name:

Title:

Company Name if signing as an agent:

Date of signature

12-10-93

## **APPENDIX JJ**

**in•tel•lect** (in't'l ekt') *n.* [  
1. the power of knowing.



# intellect<sup>TM</sup>

## Numeric Pager

### Alphanumeric Display



Identification

Location

Message

Auto Dialer

Operation Switches

ANI + DTMF +  
Message Code

Intellect helps you Know, Communicate, and Remember  
information about the World around you...

Alphanumeric Communication Delivered at Numeric Paging Cost.

Now you can keep in touch and stay informed with a  
low cost easy to use solution!

<u>Features</u>	<u>Functions</u>	<u>Benefits</u>
<b>Numeric Paging Receiver</b>	Receive numeric data, Display alphanumeric data.	- Low Monthly Cost compared with cellular or alphanumeric paging services.
<b>Serial/Parallel/Infrared Programming interface</b>	Download data including Name, Address, Phone #, Appointment data.	- Connectivity with data stored at the office.
<b>Intelligent Message Notification</b>	Combined Caller ID with DTMF entry of caller phone# and message code is compared with data previously downloaded by the user.	- Automatically determines WHO WHERE, WHY someone is calling.  - Reduced cellular credit calling costs from better call screening.
<b>Automatic Dialer</b>	Numbers received, prestored telephone #'s, long distance access and account codes, are automatically dialed for the user by placing the pager against the telephone handset.	- Easier access to Voice Mail Centers, "MEET-ME" Services. Access #'s and other data is more easily remembered when away from the office.  - Also aids users in low light environments or visually impaired persons to more easily return calls received.
<b>Removable Keyboard Accessory</b>	By attaching keyboard with connector, a user may program names, addresses, tel. #'s, other data in pager download memory.	Convenient simple programming for users not familiar or comfortable with a PC.
<b>Simple User Interface</b>	Most functions require only simple, intuitive directions and one or two buttons for operation.	- Users are able to enjoy benefits of intellect quickly.



For more information on other innovative technologies telephone:

**Innovad**<sup>TM</sup>  
Innovative Development and Manufacturing  
**1•800•441•4431**



## **APPENDIX KK**

# TELE DYNAMICS®

TeleDynamics, L.L.P. • 2200 Wheless Lane  
Austin, Texas 78723-2097  
(512)928-1533 • 24 Hour Fax: (512)928-1575

ORDER TOLL FREE: 1-800-847-5629

## 1994 International Winter Consumer Electronics Show Special Promotions

Pricing Effective January 3rd, 1994

Happy New Year! 1994 will be a record year in consumer electronics and we look forward to exciting changes taking place in our industry. Panasonic will be announcing price changes on various models year round. So don't update your pricing when you place your orders.

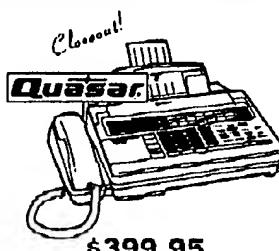
### Panasonic



\$399.95

### FAX MACHINES

**KX-F90** Facsimile with answering machine, integrated telephone and automatic telephone/facsimile switching, 17 second transmission speed, activity reporting, LCD display, automatic paper cutter, 16-level halftones, polling, 10 page document feeder, monitor speaker, 10-station one-touch dialer, 50 station speed dialer, automatic redial, timed flash memory, pause.



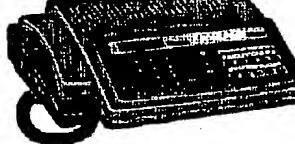
\$399.95

**PAX600** Facsimile with integrated telephone and answering machine offers monitor speaker, 21 one-touch+100 speed dial numbers, auto redial, voice time/day stamp, recordable OGM chip, toll saver, 10 page document feeder, paper cutter, out of paper memory, delay transmit, and broadcasting.



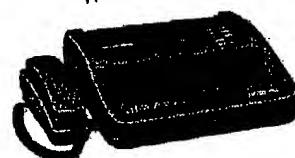
\$359.75

**FAXLINE1900** features built-in answering machine, automatic paper cutter, 10 page document feeder, LCD display with time, date, number dialed, 16 step gray scale, 70 speed dial locations, delay transmit, activity report, transmission confirm slip, 164' thermal paper roll, 110/220 VAC switchable.



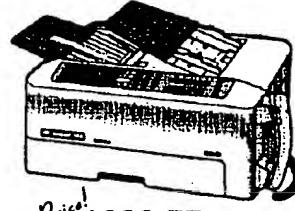
\$297.65

**M820** Fax features 10-page feeder and 164' thermal paper roll, silent operation alerts you only when your fax detects a voice call, 10 one-touch memory keys plus an additional 20 speed-dial numbers, curl reduction technology, monitor speaker, redial, hold, telephone call timer, 16-character display, built-in clock and calendar.



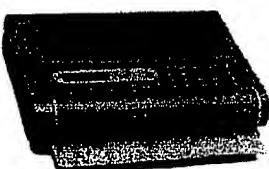
\$339.96

**M1500** Facsimile features paper cutter, 10-page document feeder, pre-recorded voice prompt, 16-level grayscale, 10# one-touch dialing plus 10# speed dialing, LCD display, programmable personal identifier, transmission confirmation reports, chain-dialing capabilities, receive polling only, uses 98' thermal paper roll.



\$939.75

**M3000** Plain Paper Fax with 250-sheet paper tray that adjusts to accept either letter or legal sized pages, out-of-paper memory reception, 5 delayed dialing commands, 80# dialer, 16-level grayscale, 30 page document feeder, two-line 16-character display.



*price!* \$669.00  
MIT-F15PWR Optional Clip-on AC power supply.  
\$75.00

MIT-F15CSE Optional Carrying Case with Shoulder Strap.  
\$45.00

MIT-F15BAT Optional Clip-On Nicad Battery  
\$109.00

## FAX MACHINE

Canon



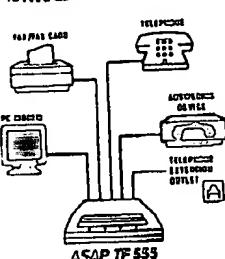
\$299.95

**FAXPHONE 16** Features automatic facsimile/phone switchover with extension phone transfer, delayed transmission, 10 sheet automatic document feeder, 16 shades of gray scale, polling, LCD, local copy function, 10# one touch memory plus 25# speed dialing, transmitter terminal identification, activity report, monitor speaker, and hold.

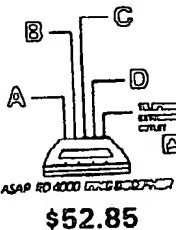
## FAX SWITCHES



COMMAND COMMUNICATIONS, INC.



**TF-300 Plus** Fax/Phone/Answering Device      \$58.75  
**TF-333** Fax or Computer/Phone/Answering Device      \$64.85  
**TF-505** Fax/Computer/Phone/Answering Device      \$84.65  
**TF-555** Fax/Computer/Phone/Answering Device      \$89.95  
**CF3000** Data Switch for Fax/Computer      \$49.85

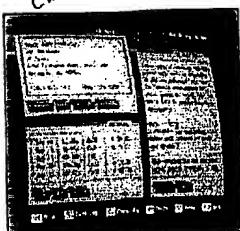


\$52.85

**RD4000 RING DECRYPTER** is a call routing device that works with the distinctive ringing service provided by the telephone company. It directs incoming calls to any one of four designated telephone devices on a single telephone line.

## ROCHELLE

Classical!



\$139.95

**CALLER ID + PLUS** is the first integrated hardware and software system to let you use your PC to link the calling number to your database of information on the caller. The Caller ID+Plus displays the number of the incoming call with useful information about the caller and a log of all calls to and from the number.

(Requires Caller ID Service.)

UNIVERSAL



\$27.60

**TEL-6650** Caller ID system keeps a record of the last 50 calls and features a one-touch speed dial of any number in memory, automatically displays complete telephone number, time and date of incoming calls, large easy to read display, desk/wall mountable, requires one 9V battery (not included). Available in Pearl/Grey.

## High Sensitivity Thermal Paper

**PAPER49** - 49' thermal facsimile paper (3 rolls)      \$6.75  
**PAPER98** - 98' thermal facsimile paper (6 rolls)      \$11.85  
**PAPER 164** - 164' thermal facsimile paper (6 rolls)      \$19.85  
**PAPER 328** - 328' thermal facsimile paper (6 rolls)      \$34.85

## CALLER ID PRODUCTS

CIDCO  
INCORPORATED

"The Caller ID Company"



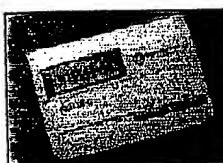
**SN-30A-02** Holds 30# memory with new call light and blocked call light feature.      \$38.50

**SL-64-2** Holds 64# memory with backlighting (comes with AC Adaptor).      \$49.00

**SA-60A-01** Holds 60 name/numbers with new call light and blocked call light.      \$49.00

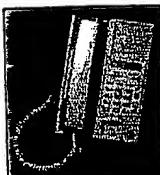
**SA-85A-01** Holds 85 name/numbers with new call light and blocked call light.      \$56.00

\*\*Models SA-60A-01 and SA-85A-01 are bilingual, displaying either English or Spanish

Southwestern Bell  
Freedom Phone®

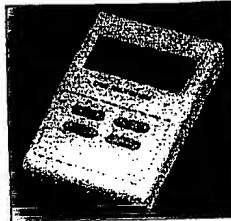
\$33.90

**FM120** Caller ID unit features 20# memory, 10 character single line readout, date/time of call key, wall or desk mountable. Available in White.



\$51.90

**FM115** Caller ID integrated telephone with 13# memory and call timer on telephone, redial, tone/pulse dialing, 20# caller ID memory with single line number display.

CDL™  
COLONIAL DATA TECHNOLOGIES

\$61.65

**370NS** works with both single data and multi-data message caller ID services including Name/Number, Name Only and Number Only. The deluxe display has 3 lines of information per screen. Bi-directional scrolling keys let you review your calls in any direction. It stores the 70 most recent calls (maximum 94) and features privacy block.



## NOVELTY



RECYCO-SP-11

RECYCO-SP-12

RECYCO-SP-13

RECYCO-SP-18

RECYCO-SP-19

RECYCO-SP-20

\$21.35



\$9.99

**SH910** High heel shoe phone is pulse/tone switchable with redial and mute. Available in Black.



\$5.99

**AC-400** Stylite clear one piece with neon bulbs that flash when the phone rings, tone/pulse switchable, with ringer on/off. Available with white cord or multi-colored cord.



\$26.95

**SWATCH** twin phones allow the user to talk and listen with the handset and the base! The deluxe model offers 20 names and numbers for memory dialing. Standard models: TXO200 Naranja and TXW202 Marshmallow!!!.



\$34.85

**1208 TALKING GARFIELD** speaks with each ring of the phone. Garfield says 11 different wise-crack phrases, redial, pulse/tone dial.

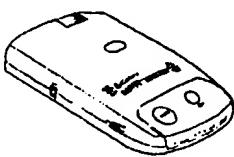


\$24.95

**GOTHAM** telephone has hand painted enamel finish, brass bell ringer, tone dialing, mute and redial. Available in Black or Red.



## RADAR DETECTOR



\$134.65

**RDL-412SW** Trapshooter superwide band radar/laser with adjustable slide-in windshield bracket, signal strength LEDs, anti-falsing circuitry, detects all radar and laser signals including photo, stalker, X, K, Ka superwide band plus laser, separate audible alarms for all radar/laser signals.

**SoftPHONE** is made from high-density foam and it's squeezable and lightweight. If you accidentally drop a SoftPHONE, you won't have to apologize to the person on the other end! Each model has its own novelty design with layers of foam in bright colors and shapes. Each phone features on/off ringer, redial, and tone/pulse dialing. Available in SP-11 GOLF; SP-12 BASKETBALL; SP-13 FOOTBALL; SP-18 EAR/MOUTH; SP-19 RAINBOW; and SP-20 SPACE.



## MULTI-LINE



\$29.95

**NWB-22455** Easy Touch two-line with LED, conferencing, 12# memory (2 one-touch), redial, hold, hearing aid compatible, tone/pulse dialing.



\$89.75

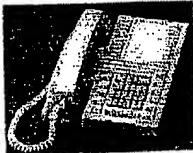
**VARICOM-28** Two-line non-KSU telephone system with intercom (up to 8 phones), intercom ring and voice announce, all call, speakerphone, 40# memory, 3-way conference, redial, hold, tone/pulse, pause, flash, compatible with all standard phones, hearing aid compatible, requires 3 AAA batteries.

## Panasonic



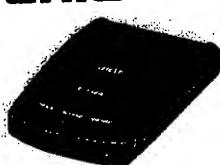
1-5                    6-Up  
\$144.50            \$141.65

**KX-T3185** Three-line feature phone in matte finish with speakerphone, volume control, LCD, conference, hold, 24 station one touch dialer and 20 station speed dialer, separate ringer tone and volume adjustments, auto redial, timed flash. White or Black.



\$139.97

**SUPREMACY 4300** has 4-line capability, intercom, 20# memory, speakerphone, conference, automatic privacy with override, voice paging, handsfree answerback in intercom.



\$71.35

## RADAR DETECTOR

**LRD2900** fully integrated radar/laser detector with X, K and Laser. It features 3 visual alarms, 3 audible tones, audio only selector, volume control, windshield mount, city/highway switch.

## CORDLESS PHONES

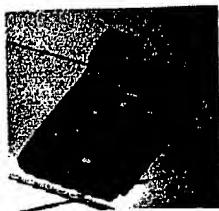


\$52.75

## Panasonic

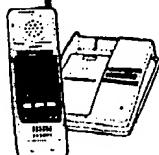


1-5 \$101.85    6-UP \$99.85



1-5 \$110.75    6-UP \$108.85

## UNIVERSAL



\$35.95

Available to Dealers in ALASKA, ARIZONA, COLORADO, IDAHO, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, OKLAHOMA, OREGON, TEXAS, UTAH, WASHINGTON and WYOMING.



\$84.95



## ANSWERING SYSTEMS

**ATT1337** Remote Digital Answering System, digital LED message display, memo feature, changeable security code, announce only feature, new message playback, call intercept, up to 7 minutes of digital recording memory.



\$96.65

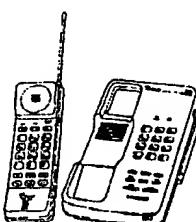
**ATT1339** Remote Digital Answering System with digital LED message display, time and day announcement of each message, memo feature, changeable security code, announce only feature, new message playback, call intercept, up to 7 minutes of digital recording memory.

## 900 MHZ CORDLESS PHONES

**900DL** 900 MHz digital cordless features high immunity to RF noise and interference, 20 channel auto-select with manual override, out-of-range indicator, four programmable ring types, mute, hold, page, flash, redial, 10# memory, tone/pulse dialing.



\$164.95



\$219.65

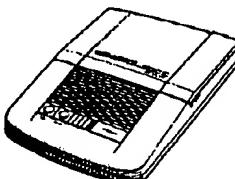
**900DX** Digital cordless phone with new 900 MHz operation, speakerphone, dualkeypads, tone/pulse dialing, scrambled voice communication between handset and base, out-of-range indication, two-way paging, privacy mode, ten number memory, 20 channel automatic selection.



\$269.85

**CP-910** New digital 900 Mhz spread spectrum technology cordless provides scrambled conversation across multiple channels for totally private telephone conversations, built-in handset antenna, 100 user-selectable channels, page/find button, redial. Available in Black.

## CODE-A-PHONE®



\$35.99

**CAP1820** Answering Machine with 7-function remote with toll saver, announcement and messages are recorded on the same microcassette tape, power fail protection, call screening, personal security code, remote on, blinking message counter.



\$98.75

## Panasonic

**KX-T1740** Two-line beeperless remote answering machine with two variable OGMs, LCD display, voice synthesized time/day recording after each message, voice menu, 12 function remote, ICM recording time selector, changeable security codes.

**BIG BUTTON PHONES**

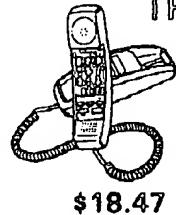
\$29.85

ITT

8810 Big Button with stylish oversized dial, Braille characters on keys, 3 programmable memory locations, neon visual ringing indicator, desk/wall mount, tone/pulse, redial, mute, flash, amplified handset with volume control.



\$29.85



\$18.47

**TRIM STYLE PHONES**

BS-455V Volume Control and amplifier are offered on this Extra Big Button trimstyle phone with backlit keyboard, hold with LED indicator, mechanical ringer, mute, redial and flash features.



\$9.00

**UNIVERSAL**

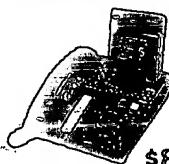
TEL-4055L Big-Button telephone with tone/pulse dial, redial and mute. Wall or Desk mountable. Available in Oyster color.



AT&amp;T

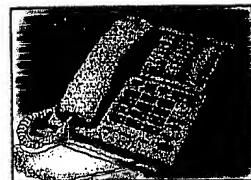
**VIDEO TELEPHONE**

Available to Dealers in ALASKA, ARIZONA, COLORADO, IDAHO, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, OKLAHOMA, OREGON, TEXAS, UTAH, WASHINGTON and WYOMING.



\$879.00

VIDEOPHONE2500 with full color motion video, 3.3" (diagonal) video screen, fixed focus camera lens with 1 to 9 foot focal range, self-view mode, one- and two-way video mode, speakerphone, multi-level handset and speaker volume control, hold and mute buttons, flash, ringer on/off, tone/pulse dialing, 12# memory.

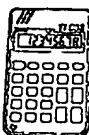
**SINGLE LINE W/INTERCOM**  
Panasonic

\$99.85

KX-T2180 New Intercom Integrated Single Line Telephone System with answer-back speakerphone, individual page and intercom works with 2 to 8 units (KX-T2180 or 3280), single intercom path, 28# memory, programmable toll restriction, volume control.

**Panasonic GLOBAL POSITIONING SYSTEM RECEIVER**

KX-G5500 Global Positioning System Receiver features compact hand-held design, backlit LCD to allow you to use it in all kinds of lighting, 5-channel parallel receiver, 99 waypoints, latitude, longitude and altitude, uses rechargeable ni-MH battery or 5AA batteries.

**CALCULATORS**


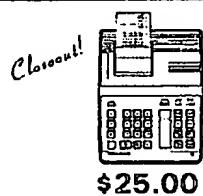
\$3.55

TI-503BP Plastic calculator with large 8-digit display, battery-powered has automatic power down to conserve battery life.



\$9.95

TI-30X General scientific calculator performs trigonometric functions, logarithms, roots, powers, reciprocals and factorials, one-variable statistics include results for mean and standard deviation, constant memory retains stored values even when the calculator is turned off.



\$25.00

TI-5034 is a desktop printer display calculator for everyday use with bright 12 digit display, uses standard 2 1/4" plain paper, 4-key memory and automatic constant.



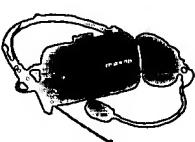
\$54.95

SP04 Headset is a handsfree headset telephone with a dial pad, works on all single line applications, redial, mute/hold, tone/pulse dialing.



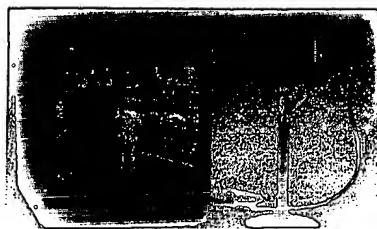
\$54.00

SP05 Universal headset for modular telephones, carbon or electronic, single or multi-line. Includes headset and handset switch, mute/hold, rotary volume control for hearing comfort.

**HANDSFREE COMMUNICATOR**


\$21.95

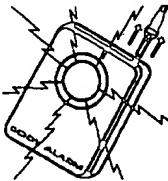
48-SX Handsfree communicator is single channel (channel C only), lightweight unit with adjustable headset, belt clip, whip antenna and wind screened boom mic., operates on two "AA" size batteries. Range approximately 1/4 mile.

**UNIVERSAL****SECURITY PRODUCTS**

**Entry Sentry II Security Observation System** comes complete with a 9" monochromatic monitor in metal housing, one industrial quality camera with 16 mm lens, 65 ft. of cable with attached standard DIN-type connectors and all necessary mounting hardware. It is engineered for a full range of residential, commercial and industrial uses including theft protection in warehouses and shopping areas, store security, home security, day care and parking lot security. It features monitor select switches to provide the option of manually or automatically viewing up to four cameras, with an adjustable display time.

*Limited Time  
Special Offer* \$249.00

**EXTRA CAMERA** for the Entry System II (System comes with ONE camera included) \$178.00

**DAC Technologies**

\$8.95

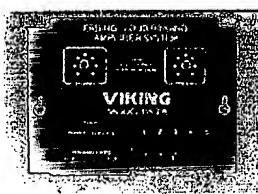
**BODY ALARM** for individual security unleashes an ear-piercing, 130 decibel alarm when the pin is removed. The compact Body Alarm is 9 volt alkaline battery operated and is made of non-breakable ABS plastic.

**TT SYSTEMS CORPORATION**

\$19.99

**PAGING PRODUCTS**

**PM-1 Paging Module** connects any touch-tone phone to a public address amplifier and speaker system, can be used with single-line or multi-line system.

**VIKING.**

\$88.00

**PA-2A** Provides loud electronic ring for night bell, warehouses, outside yards, etc. The PA-2A monitors up to 6 C.O. lines for ring or can be activated by a key system dry contact closure. Connect to unused trunk line input or paging port on Electronic or 1A2 Key or "No KSU" phones for 2 watts of paging power (enough to drive 3 paging horns). The PA-2A can also provide background music from an external source. Weather-proof paging horn included.

**CORD-Minder®  
RETRACTING TELEPHONE CORD**

16' length in R-71 Ivory,  
R-72 White or R-74 Clear

\$5.95

8' length in R-85 Ivory, R-86 White or R-88 Clear

\$4.95

**ACCESSORIES**

**CORD MINDER** replaces the handset cord and automatically takes up the slack and stows the cord neatly away - out of sight, out of mind, and more importantly - out of the way! Cord Minder is engineered for trouble-free operation. Design features include a steel spring, flexible strain relief, a durable case, special fiber for strength. Six month factory guarantee.

**SCRAMBLER**

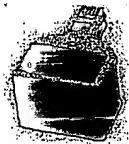
\$425.00 a Pair  
\$214.00 Each

Fully contained voice privacy device protects your conversation from end to end. Works on all standard communication systems which utilize a telephone handset - tone or rotary. Each party wanting conversation protection must use a scrambler. Works on 9 volt batteries (not included). Employs a speech spectrum inversion technique with 13,122 user selectable codes in four factory code groups providing 52,488 code combinations.

**ACCESSORIES**

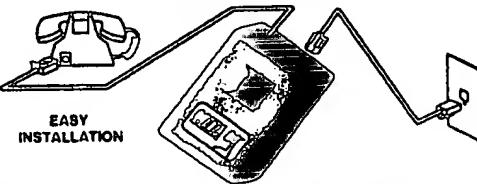
\$28.00

**TL-5** Direct-a-call automatically steers incoming telephone calls from two separate telephone lines to a single.

**VIKING.**

\$20.00

**TG-2** eliminates data crashing and eavesdropping. The first device to access the line will block the other device. Compatible with tone or rotary phones.

**EVER GET STUCK ON THE PHONE?****GOTTA GO**

EASY  
INSTALLATION

**GOTTA GO** allows you to imitate Call-Waiting. It generates the "Clicks" and brief interruption of call-waiting at the press of a button! When you find yourself in that uncomfortable situation when you want to get off the phone, simply press and hold the button until you hear the "clicks" and release. This will briefly interrupt the conversation at which point the caller may offer to "let you go" or you can simply say, "this must be the call I've been waiting for; I'll talk with you later."

\$7.95

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